

WE MANUFACTURE QUALITY  
**NOVINGENE**  
REAL-TIME PCR KITS

**2026**

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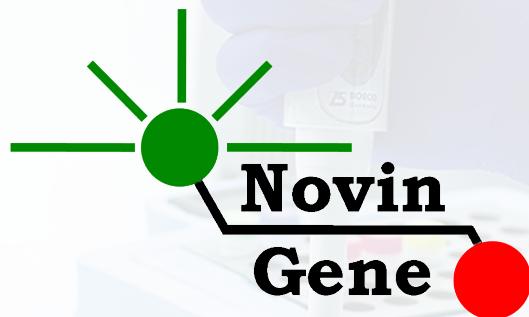
WE MANUFACTURE QUALITY

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# NOVINGENE

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REAL-TIME PCR KITS



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**"THE PATH TOWARD ACCURATE, SPECIFIC & SENSITIVE RESULTS,  
STARTS HERE WITH NOVINGENE REAL-TIME PCR KITS"**

# Certification

All NovinGene products are manufactured under strict Quality Management System. NovinGene has been certified according to ISO 13485:2016 and ISO 9001:2015 since 2018.



## Welcome to our new catalogue for 2026

"Quality is not an act, it is a habit."

Founded in 2008, **NovinGene** stands as the first producer of Real-Time PCR kits in Iran, and since its inception has remained at the forefront of molecular diagnostics. Built on over 18 years of expertise in the clinical laboratory sector, NovinGene has successfully manufactured more than 60 diagnostic kits covering infectious diseases, genetic abnormalities, and oncogenic biomarkers.

From the outset, our philosophy has been rooted in scientific excellence and innovation. We are proud to be the only company in Iran to produce IS-MMR, the internationally recognized standard for BCR-ABL monitoring, underscoring our alignment with global benchmarks. Throughout our history, we have consistently been ahead of competitors by combining scientific creativity with pioneering product development.

Equally important to us is the support we provide to laboratories and clinicians. NovinGene's dedicated technical team goes beyond conventional assistance, offering expert guidance, tailored instructions, and in-depth data analysis for each laboratory and each test. This level of customer support has become a hallmark of our company, and is unmatched within the region.

At NovinGene, we hold firm to the belief that Health and Education are the pillars of sustainable prosperity. By providing reliable, accurate, and user-friendly PCR kits, we aim to enhance disease detection, improve diagnostic precision, and support better patient outcomes—strengthening both individual care and public health across the region.

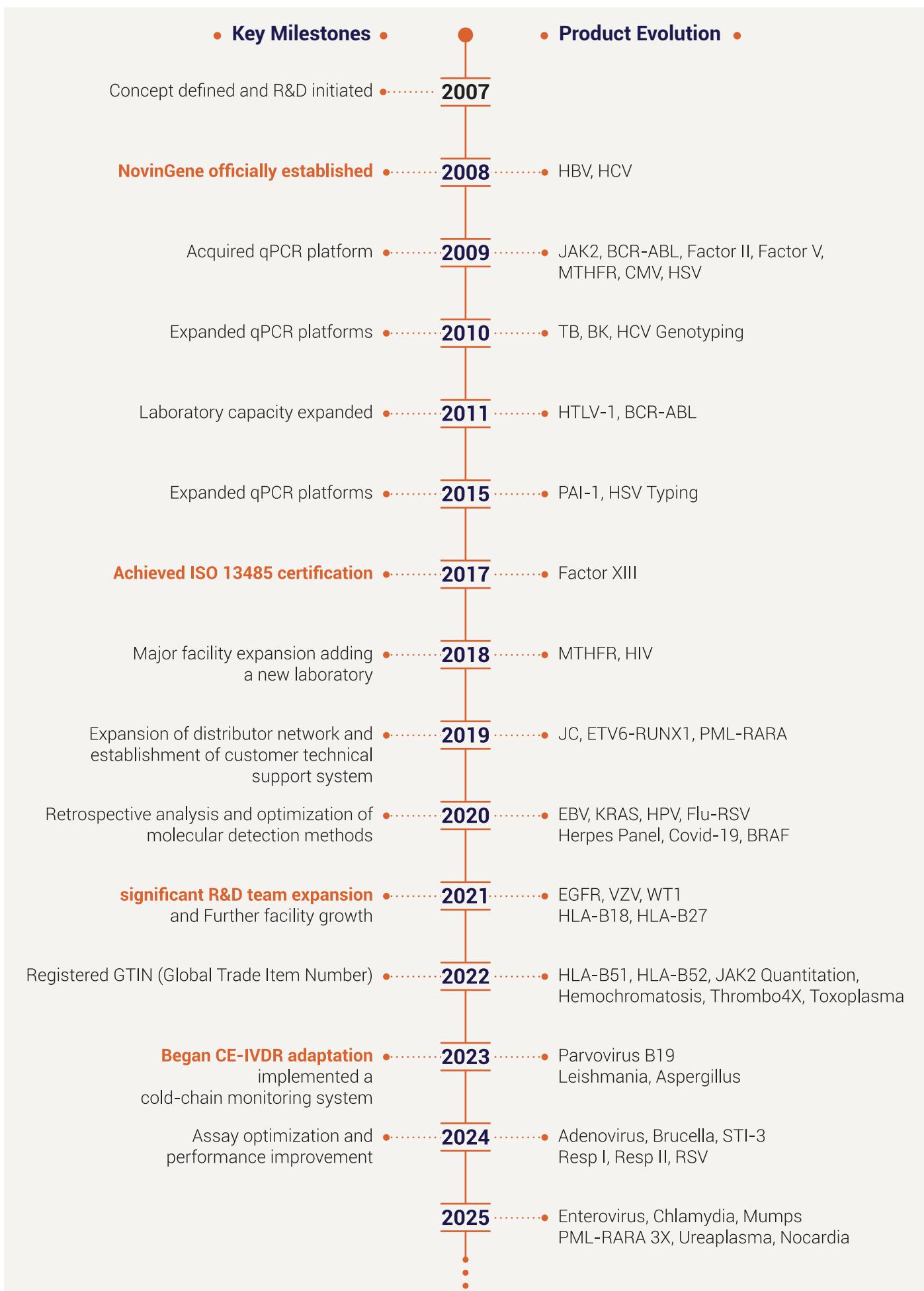
In 2026, we are expanding our portfolio with new diagnostic products such as kits for Chlamydia, Dengue, Enterovirus, Mpox, Mumps, Mycoplasma, Nocardia, PML-RARA 3X, Respiratory II, RSV, STI-6, Trichomonas, and Ureaplasma. Alongside these, we are preparing for the upcoming launch of additional products, including Measles, NRAS, and JC-BK. These additions highlight our ongoing commitment to innovation and our goal of providing clinicians with a comprehensive suite of high-performance molecular diagnostic tools.

Looking forward, our mission is to continue advancing healthcare through creativity, innovation, and originality, with the vision of becoming the leading real-time PCR kit manufacturer in the MENA region.



**"THE PATH TOWARD ACCURATE, SPECIFIC & SENSITIVE RESULTS,  
STARTS HERE WITH NOVINGENE REAL-TIME PCR KITS."**

# NovinGene Timeline of Research, Development, and Expansion



# Table of Contents



## Infectious Diseases

2

Adenovirus RQ Kit (Detection and Quantitation of Adenovirus) .....	3
Aspergillus RQ2 Kit (Detection of Aspergillus) .....	4
Aspergillus RQ4 Kit (Detection of Aspergillus) .....	5
BK RQ Kit (Detection and Quantitation of BK Virus) .....	6
Brucella RQ Kit (Detection of Brucella) .....	7
Chlamydia RQ Kit (Detection of Chlamydia trachomatis) .....	8
CMV RQ Kit (Detection and Quantitation of Cytomegalovirus) .....	9
COVID-19 Detection kit (Detection of SARS-CoV-2 RNA) .....	10
COVID-Flu Detection kit (Detection of SARS-CoV-2 and Influenza A/B) .....	11
Dengue RQ Kit (Detection of Dengue) .....	12
EBV RQ Kit (Detection and Quantitation of Epstein-Barr Virus) .....	13
Enterovirus RQ Kit (Detection of Enterovirus) .....	14
Flu-RSV RQ Kit (Detection of Influenza A/B and Respiratory Syncytial Viruses) .....	15
HBV RQ Kit (Detection and Quantitation of Hepatitis B Virus) .....	16
HCV Genotype RG Kit (Detection and Genotyping of Hepatitis C Virus) .....	17
HCV RQ Kit (Detection and Quantitation of Hepatitis C Virus) .....	18
Herpes Panel RQ Kit (Detection of CMV, EBV, HSV-1, HSV-2 and VZV) .....	19
HHV6 RQ Kit (Detection and Quantitation of HHV-6A and HHV-6B) .....	20
HIV RQ Kit (Detection and Quantitation of Human Immunodeficiency Virus) .....	21
HPV HR RQ3 Kit (Detection of Human Papilloma Virus (HPV) Types) .....	22
HPV HR RQ4 Kit (Detection of Human Papilloma Virus (HPV) Types) .....	23
HSV 1/2 RQ Kit (Detection and Quantitation of Herpes Simplex Virus 1 and 2) .....	24
HSV Type RQ Kit (Detection and Differentiation of Herpes Simplex Virus 1 and 2) .....	25
HTLV RQ Kit (Detection and Quantitation of HTLV-I) .....	26
JC RQ Kit (Detection and Quantitation of JC Virus) .....	27
JC-BK RQ Kit (Detection and Quantitation of JC-BK Viruses) .....	28
Leishmania RQ Kit (Detection of leishmania) .....	29
Measles RQ Kit (Detection of Measles Virus) .....	30
Mpox RQ Kit (Detection of Mpox Virus) .....	31
Mumps RQ Kit (Detection of Mumps Virus) .....	32
Mycoplasma RQ Kit ( Detection and differentiation of Mycoplasma hominis and Mycoplasma genitalium) .....	33
Nocardia RQ Kit (Detection of Nocardia Species) .....	34
Parvovirus B19 RQ Kit (Detection and Quantitation of Parvovirus B19) .....	35
Resp I RQ Kit (Detection of SARS-CoV-2, Influenza A/B and Respiratory Syncytial Viruses) .....	36
Resp II RQ Kit (Detection of SARS-CoV-2, Influenza A/B, Respiratory Syncytial Virus and Human Parainfluenza Viruses) .....	37
RSV RQ Kit (Detection of Respiratory Syncytial Virus) .....	38
STI-3 RQ Kit (Detection of Sexually Transmitted Infections) .....	39

STI-7 RQ Kit (Detection of Sexually Transmitted Infections) .....	40
TB RQ Kit (Detection and Quantitation of M. tuberculosis) .....	41
Toxo RQ Kit (Detection of Toxoplasma gondii) .....	42
Trichomonas RQ Kit (Detection of Trichomonas vaginalis) .....	43
Ureaplasma RG Kit (Detection and Differentiation of Ureaplasma parvum and Ureaplasma urealyticum) .....	44
VZV RQ Kit (Detection and Quantitation of Varicella Zoster Virus) .....	45



## Oncogenetics 46

AML1-ETO RQ Kit (Detection and Quantitation of BCR-ABL p210 Transcripts) .....	47
BCR-ABL (p190) RQ Kit (Detection and Quantitation of BCR-ABL p190 Transcripts) .....	48
BCR-ABL (p210) RQ Kit (Detection and Quantitation of BCR-ABL p210 Transcripts) .....	49
BRAF RQ Kit (Detection of BRAF Mutations) .....	50
EGFR RQ Kit (Detection of EGFR Mutations) .....	51
ETV6-RUNX1 RQ Kit (Detection and Quantitation of ETV6-RUNX1 (TEL-AML1) Transcripts) .....	52
JAK2 MQ Kit (Detection and Quantitation of JAK2 (V617F) Mutation) .....	53
JAK2 RQ Kit (Detection of JAK2 (V617F) Mutation) .....	54
KRAS RQ Kit (Detection of KRAS Mutations) .....	55
NRAS RQ Kit (Detection of NRAS Mutations) .....	56
PML-RARA (bcr1) RQ Kit (Detection and Quantitation of PML-RARA (bcr1) Transcripts) .....	57
PML-RARA (bcr2) RQ Kit (Detection and Quantitation of PML-RARA (bcr2) Transcripts) .....	58
PML-RARA (bcr3) RQ Kit (Detection and Quantitation of PML-RARA (bcr3) Transcripts) .....	59
PML-RARA 3X RQ Kit (Detection and Differentiation of PML-RARA (bcr1, bcr2, bcr3) Transcripts) .....	60
WT1 RQ Kit (Detection and Quantitation of WT1 Transcripts) .....	61



## Genetics 62

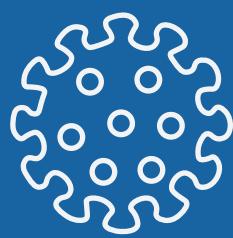
Factor II RQ Kit (Detection of Factor II (G20210A) Mutation) .....	63
Factor V RQ Kit (Detection of Factor V Leiden (G1691A) Mutation) .....	64
Factor XIII RQ Kit (Detection of Factor XIII (Val34Leu) Polymorphism) .....	65
Hemochromatosis RQ Kit (Detection of H63D and C282Y Mutations) .....	66
HLA-B18 RQ Kit (Detection of HLA-B18) .....	67
HLA-B27 RQ Kit (Detection of HLA-B27) .....	68
HLA-B51 RQ Kit (Detection of HLA-B51) .....	69
HLA-B52 RQ Kit (Detection of HLA-B52) .....	70
MTHFR-1298 RQ Kit (Detection of MTHFR (A1298C) Mutation) .....	71
MTHFR-677 RQ Kit (Detection of MTHFR (C677T) Mutation) .....	72
PAI-1 RQ Kit (Detection of PAI-1 4G/5G polymorphism) .....	73
Thrombo4X Kit (Detection of Factor II, Factor V Leiden, MTHFR C677T and MTHFR A1298C Mutations) .....	74



## Products List 76



## Alphabetical Index 80



# Infectious Diseases

# Adenovirus RQ Kit

## Detection and Quantitation of Adenovirus

Adenoviruses belong to the Adenoviridae family of non-enveloped and dsDNA viruses that usually cause mild infections in the upper or lower respiratory tract, digestive tract, and conjunctiva. Adenovirus transmission occurs person to person mostly via aerosolized droplets and fecal-oral route. Adenovirus infection is more common in young children (more than 80%) due to the lack of humoral immunity. People with compromised immune systems (organ transplant recipients, people with human immunodeficiency virus, and people with congenital immunodeficiency) are at a higher risk of developing this infection. The incubation period lasts from 2 to 14 days. However, in immunocompromised people, it could remain latent in kidney parenchyma, lymph tissue and other tissues for years.

Adenovirus RQ Kit provides a ready-to-use Real-Time PCR assay for the detection and quantitation of Adenovirus DNA.

## Advantages of Adenovirus RQ Kit

### Ready to Use

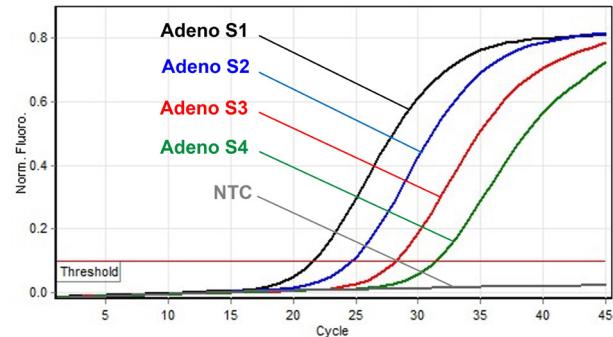
The Adeno Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM and Yellow/VIC channels.

### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.

### Kit contents

Adeno Mix	PCR Master Mix for the detection of Adenovirus and Internal Control	360 $\mu$ l
Adeno Standards	4 quantitation Standards (10,000 to 10 copies/ $\mu$ l)	150 $\mu$ l
Internal Control	Internal Control DNA	250 $\mu$ l
Water	PCR grade Water	200 $\mu$ l
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical Adeno graph in Green channel for Rotor-Gene

### Kit Specifications

Analytical Sensitivity	1 copy/ $\mu$ l for the cloned target
Linear Range	10 million to 10 copies/ $\mu$ l for the cloned target
Reaction Type	Quantitative Real-time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25 $\mu$ l.

# Aspergillus RQ2 Kit

## Detection of Aspergillus

Aspergillus is an opportunistic type of fungal mold that exists everywhere. More than a few hundred Aspergillus species have been identified. Among them about 40 could be pathogenic for humans. While they are not pathogenic for a healthy person, they may cause mild allergic reactions to significant and life-threatening infections in patients with compromised immune system. Most of these infections have been related to *A. fumigatus*, *A. flavus*, *A. terreus* and *A. niger*. Early diagnosis of this disease is crucial for proper patient management.

Aspergillus RQ2 Kit provides a ready-to-use Real-Time PCR assay for the detection of Aspergillus species including *A. fumigatus*, *A. flavus*, *A. terreus* and *A. niger*.

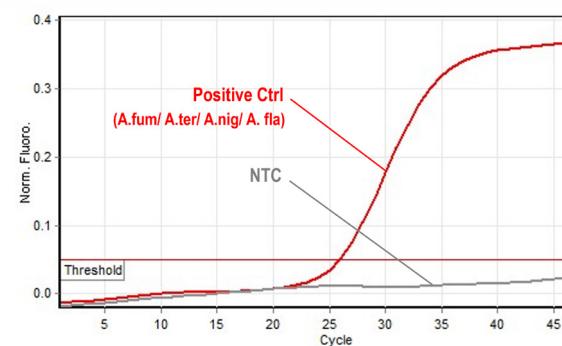
## Advantages of Aspergillus RQ2 Kit

### Ready to Use

The ASPG 2C Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM and Yellow/VIC channels.

### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.



Typical Aspergillus graph in Green channel for Rotor-Gene

### Kit contents

ASPG 2C Mix	PCR Master Mix for the detection of Aspergillus and Internal Control	360µl
Aspergillus Pos Ctrl	4 Pos Controls: <i>A. fumigatus</i> Positive Control, <i>A. flavus</i> Positive Control, <i>A. terreus</i> Positive Control and <i>A. niger</i> Positive Control	100µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

### Kit Specifications

Analytical Sensitivity	2-9 copies/µl based on each species
Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# Aspergillus RQ4 Kit

## Detection of Aspergillus

Aspergillus is an opportunistic type of fungal mold that exists everywhere. More than a few hundred Aspergillus species have been identified. Among them about 40 could be pathogenic for humans. While they are not pathogenic for a healthy person, they may cause mild allergic reactions to significant and life-threatening infections in patients with compromised immune system. Most of these infections have been related to *A. fumigatus*, *A. flavus*, *A. terreus* and *A. niger*. Early diagnosis of this disease is crucial for proper patient management.

Aspergillus RQ4 Kit provides a ready-to-use Real-Time PCR assay for the detection and differentiation of Aspergillus species including *A. fumigatus*, *A. flavus*, *A. terreus* and *A. niger*.

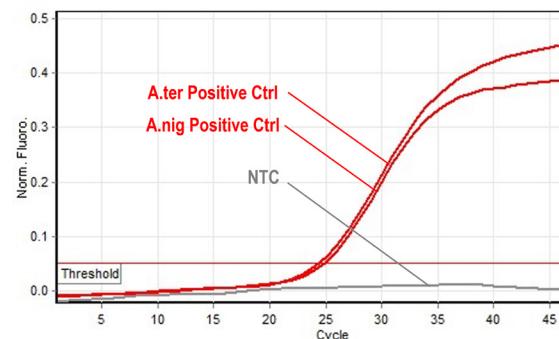
## Advantages of Aspergillus RQ4 Kit

### Ready to Use

The ASPG 4C Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM, Yellow/VIC, Orange/ROX and Red/Cy5 channels.

### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.



Typical Aspergillus graph in Green channel for Rotor-Gene

### Kit contents

ASPG 4C Mix	PCR Master Mix for the detection of Aspergillus and Internal Control	360µl
Aspergillus Pos Ctrls	4 Pos Controls: <i>A. fumigatus</i> Positive Control, <i>A. flavus</i> Positive Control, <i>A. terreus</i> Positive Control, <i>A. niger</i> Positive Control	100µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

### Kit Specifications

Analytical Sensitivity	2-9 copies/µl based on each species
Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Multiplex (FAM, VIC, ROX, Cy5)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# BK RQ Kit

## Detection and Quantitation of BK Virus (BKV)

BK Virus is a member of polyomavirus genus with a double stranded DNA genome. The virus is widespread with a seroprevalence of up to 90% in adults. Infection usually happens during the childhood and is either asymptomatic or with mild symptoms. Following initial infection, virus persists as a lifelong latent infection. BKV can cause significant consequences in renal or bone marrow transplant patients including polyomavirus associated nephropathy (PVAN) and graft loss. Quantitative monitoring of BKV load in plasma or urine of transplant recipients is essential and a load of 10,000 copies/ml in plasma or 10 million copies/ml in urine in 3 weeks or more is an early indication of PVAN.

BK RQ Kit provides a ready-to-use Real-Time PCR assay for the detection and quantitation of BK virus DNA.

## Advantages of BK RQ Kit

### Ready to Use

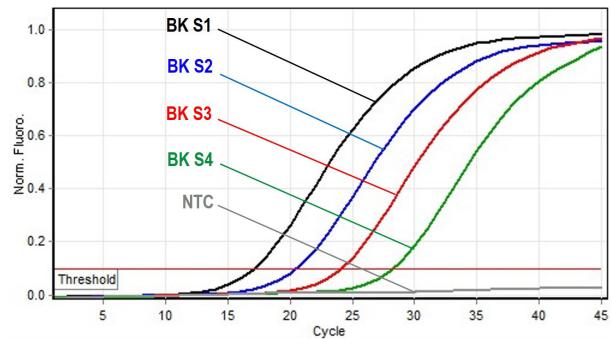
The BK Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM and Yellow/VIC channels.

### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.

### Kit contents

BK Mix	PCR Master Mix for the detection of BK and Internal Control	360 $\mu$ l
BK Standards	4 quantitation Standards (10,000 to 10 copies/ $\mu$ l)	150 $\mu$ l
Internal Control	Internal Control DNA	250 $\mu$ l
Water	PCR grade Water	200 $\mu$ l
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical BK graph in Green channel for Rotor-Gene

### Kit Specifications

Analytical Sensitivity	2 copies/ $\mu$ l for the cloned target
Linear Range	10 million to 100 copies/ $\mu$ l for the cloned target
Reaction Type	Quantitative Real-time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25 $\mu$ l.



# Brucella RQ Kit

## Detection of Brucella

Brucella are gram-negative bacteria that cause Brucellosis, one of the most common zoonotic diseases. Brucellosis is most prevalent in areas where people live in close contact with infected animals. Annually, about 500,000 new cases of human Brucellosis are reported worldwide. Consumption of contaminated milk or milk products, direct contact with an infected animal, or inhalation of aerosols are the main routes of transmission. Twelve species of Brucella have been identified of which Brucella melitensis, Brucella suis, Brucella abortus and Brucella canis have moderate to significant human pathogenicity. Early diagnosis of this disease is crucial for proper patient management.

Brucella RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of Brucella.



## Advantages of Brucella RQ Kit

### Ready to Use

The Brucella Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM and Yellow/VIC channels.

### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.

### Kit contents

Brucella Mix	PCR Master Mix for the detection of Brucella and Internal Control	360µl
Brucella Pos Ctrls	Positive Controls	100µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

### Kit Specifications

Analytical Sensitivity	1 copy/µl for the cloned targets
Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# Chlamydia RQ Kit

## Detection of Chlamydia trachomatis

Chlamydia trachomatis is one of the most common causes of sexually transmitted infections. This bacterium often leads to asymptomatic infections in the genitourinary tract. Consequently, the late diagnosis of such infections results in delayed treatment, which can lead to serious and sometimes permanent health complications. These complications may include pelvic inflammatory disease, and infertility.

Chlamydia RQ Kit provides a ready-to-use Real-Time PCR assay for detection of Chlamydia trachomatis.



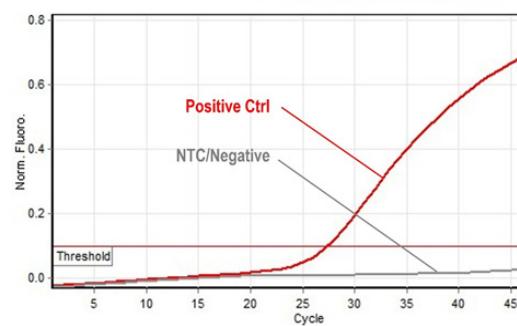
## Advantages of Chlamydia RQ Kit

### Ready to Use

The Chlamydia Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM and Yellow/VIC channels.

### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.



Typical Chlamydia graph in Green channel for Rotor-Gene

### Kit contents

Chlamydia Mix	PCR Master Mix for the detection of Chlamydia trachomatis	360µl
STI Pos Control	Positive Control	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

### Kit Specifications

Analytical Sensitivity	2.8 copies/µl for the cloned target
Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

## Detection and Quantitation of Cytomegalovirus (CMV)

Human Herpesvirus 5 (HHV-5) known as Cytomegalovirus (CMV) is a double-stranded DNA virus and a member of Herpesviridae family. It is a widespread pathogen with high seropositivity (about 80%) in adult population. Primary infection is usually subclinical and mostly happens in early childhood. It is followed by the latent infection and CMV persists in the infected person through life. CMV can be reactivated in immunocompromised hosts, for example after stem cell, bone marrow or solid organ transplantation or in the course of HIV infection.

CMV RQ Kit provides a ready-to-use Real-Time PCR assay for the detection and quantitation of CMV DNA.

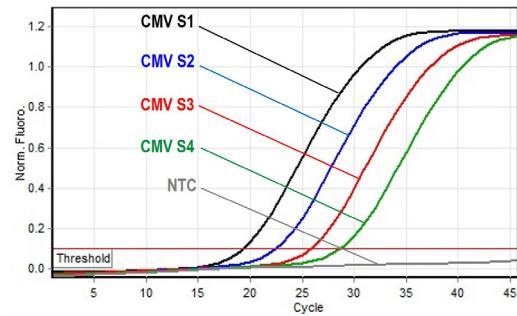
### Advantages of CMV RQ Kit

#### Ready to Use

The CMV Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM and Yellow/VIC channels.

#### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.



Typical CMV graph in Green channel for Rotor-Gene

### Kit contents

CMV Mix	PCR Master Mix for the detection of CMV and Internal Control	360µl
CMV Standards	4 quantitation Standards (10,000 to 10 copies/µl)	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

### Kit Specifications

Analytical Sensitivity	1 copy/µl for the cloned target
Linear Range	1 million to 1 copy/µl for the cloned target
Reaction Type	Quantitative Real-time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# COVID-19 RQ Kit

## Detection of SARS-CoV-2 RNA

Coronaviruses are enveloped viruses with single stranded RNA genome. Up to 2002 they were considered mostly as cause of common cold. However, with the emergence of SARS (Severe Acute Respiratory Syndrome by SARS CoV) in 2002, then MERS (Middle East Respiratory Syndrome by MERS CoV), and recently COVID-19 (by SARS-CoV-2), they are considered major health problem issues.

COVID-19 RQ Kit is a ready-to-use One-Step Real-Time RT-PCR assay for the simultaneous detection of SARS-CoV-2 virus.

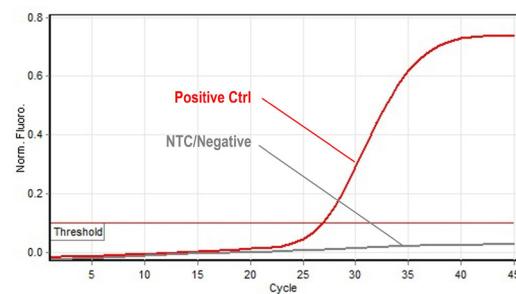
## Advantages of COVID-19 RQ Kit

### Ready to Use

The CoV2 Mix contains all the necessary reagents for One-Step Real-Time RT-PCR detection of SARS-CoV-2 RNA. The Mix is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample RNA. Results are viewed in Green/FAM, Yellow/VIC and Orange/ROX channels.

### Internal Control

Kit also contains reagents for the detection of a synthetic sequence as an Internal Control which is detected in Orange/ROX channel. Internal Control prevents false negative results due to extraction failure, reaction inhibition or setup errors.



Typical Controls graph in green channel for Rotor-Gene

### Kit contents

CoV2 Mix	RT-PCR Master Mix for the detection of SARS-CoV-2	360µl
Positive Ctrl	Positive Control for SARS-CoV-2	100µl
Internal Control	Internal Control	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

### Kit Specifications

Analytical Sensitivity	17 copies/µl for SARS-CoV-2
Reaction Type	Qualitative Real-time RT-PCR
Detection Method	TaqMan probe, Multiplex (FAM, VIC, ROX)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# COVID-Flu RQ Kit

## Detection of SARS-CoV-2 and Influenza A/B

Coronaviruses are enveloped viruses with single stranded RNA genome. Up to 2002 they were considered mostly as cause of common cold. However, with the emergence of SARS (Severe Acute Respiratory Syndrome by SARS CoV) in 2002, then MERS (Middle East Respiratory Syndrome by MERS CoV), and recently COVID-19 (by SARS-CoV-2), they are considered major health problem issues.

Human influenza A and B are enveloped RNA viruses of the Orthomyxoviridae family. While both viruses cause seasonal flu epidemics, Influenza A virus is responsible for the majority of them and may also cause pandemics.

COVID-Flu RQ Kit is a ready-to-use One-Step Multiplex Real-Time RT-PCR assay for the simultaneous detection of SARS-CoV-2, Influenza A virus and Influenza B viruses.

## Advantages of COVID-Flu RQ Kit

### Ready to Use

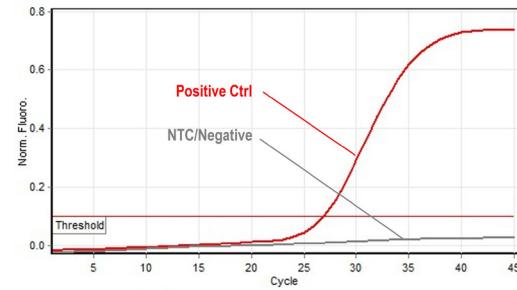
The CoV-Flu Mix contains all the necessary reagents for One-Step Real-Time RT-PCR detection of targets. The Mix is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample RNA. Results are viewed in Green/FAM, Yellow/VIC and Orange/ROX channels.

### Internal Control

Kit also contains reagents for the detection of a synthetic sequence as an Internal Control which is detected in Orange/ROX channel. Internal Control prevents false negative results due to extraction failure, reaction inhibition or setup errors.

### Kit contents

CoV-Flu Mix	RT-PCR Master Mix for the detection of SARS-CoV-2, Flu A and Flu B	360µl
Positive Ctrl	Positive Control for SARS-CoV-2, Flu A and B	100µl
Internal Control	Internal Control	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical Controls graph in Green channel for Rotor-Gene

### Kit Specifications

Analytical Sensitivity	17 copies/µl for SARS-CoV-2 10 copies/µl for Influenza A virus and Influenza B virus
Reaction Type	Qualitative Real-time RT-PCR
Detection Method	TaqMan probe, Multiplex (FAM, VIC, ROX)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# Dengue RQ Kit

## Detection of Dengue

Dengue virus, is a flavivirus from the Flaviviridae family, contains a single-stranded RNA genome and is a major global health concern, particularly in tropical and subtropical regions. The virus is primarily transmitted by Aedes aegypti and Aedes albopictus mosquitoes and causes dengue fever, characterized by symptoms such as high fever, severe headache, skin rash as well as joint and muscle pain. In severe cases, the disease can progress to dengue hemorrhagic fever or dengue shock syndrome, both of which are potentially fatal.

Dengue RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of Dengue RNA serotypes: DENV-1, DENV-2, DENV-3, DENV-4.

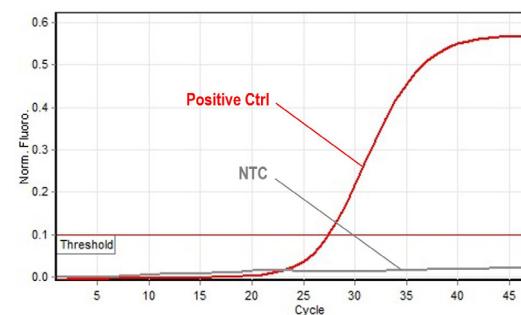
## Advantages of Dengue RQ Kit

### Ready to Use

The Dengue Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample RNA. Results can be viewed in Green/FAM, Yellow/VIC, Orange/ROX, Red/Cy5 channels.

### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.



Typical Dengue graph in Green channel for Rotor-Gene

### Kit contents

Dengue Mix	PCR Master Mix for the detection of Dengue and Internal Control	360µl
Dengue Pos Ctrl	Positive Controls	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

### Kit Specifications

Analytical Sensitivity	5 copies/µl for the cloned target
Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Multiplex (FAM, VIC, ROX, Cy5)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# EBV RQ Kit

## Detection and Quantitation of Epstein-Barr Virus (EBV)

Human Herpesvirus 4 (HHV-4) known as Epstein-Barr Virus (EBV) is a double-stranded DNA virus and a member of Herpesviridae family. Infection occurs mostly in early childhood and without clinical symptoms. The primary infection is followed by the lifelong latent infection and about 90% of adult population are infected with this virus. EBV has also been linked to a variety of cancers including lymphoma and nasopharyngeal carcinoma. It also can be reactivated in immunocompromised hosts, after transplantation or following therapy in cancer patients leading to lymphoproliferative disorders. Therefore, detection of EBV and monitoring of its viral load is important in these patients.

EBV RQ Kit provides a ready-to-use Real-Time PCR assay for the detection and quantitation of Epstein Barr Virus.

### Advantages of EBV RQ Kit

#### Ready to Use

The EBV Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM and Yellow/VIC channels.

#### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.

#### Kit contents

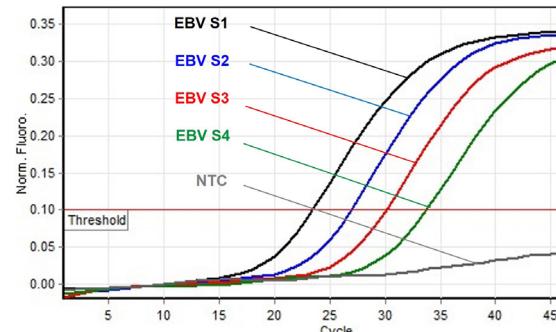
EBV Mix	PCR Master Mix for the detection of EBV and Internal Control	360µl
EBV Standards	4 quantitation Standards (10,000 to 10 copies/µl)	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

#### Kit Specifications

Analytical Sensitivity	0.5 copies/µl for the cloned target
Linear Range	1 million to 1 copy/µl for the cloned target
Reaction Type	Quantitative Real-time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.



Typical EBV graph in Green channel for Rotor-Gene

# Enterovirus RQ Kit

## Detection of Enterovirus

Enteroviruses are non-enveloped viruses with single-stranded RNA genomes. The genus Enterovirus is a member of the Picornaviridae family. Transmission primarily occurs via the fecal-oral route, although respiratory spread is also reported. While many infections remain asymptomatic or mild, enteroviruses can cause a broad clinical spectrum, including, aseptic meningitis, and acute flaccid paralysis. Detecting by traditional cell culture is time-consuming and has limited sensitivity, therefore real-time reverse transcription PCR is recommended for rapid and accurate detection.

Enterovirus RQ Kit provides a ready-to-use Real-Time RT-PCR assay for detection of Enterovirus.

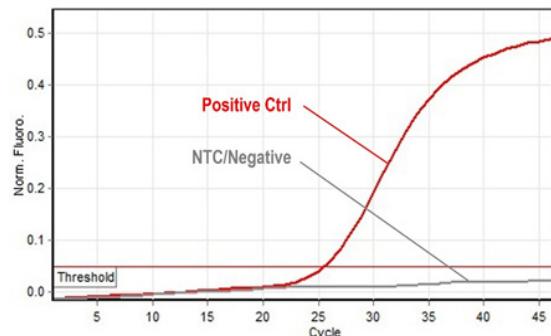
## Advantages of Enterovirus RQ Kit

### Ready to Use

The Entero Mix contains all necessary reagents for Real-Time RT-PCR and is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample RNA. Results can be viewed in Green/FAM and Yellow/VIC channels.

### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.



Typical Enterovirus graph in Green channel for Rotor-Gene

### Kit contents

Entero Mix	PCR Master mix for the detection of Enterovirus	360µl
Entero Pos Control	Positive Control	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

### Kit Specifications

Analytical Sensitivity	21 copies/µl for the cloned target
Reaction Type	Qualitative Real-time RT-PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# Flu-RSV RQ Kit

## Detection of Influenza A/B and Respiratory Syncytial Viruses (RSV)

Human influenza A and B are enveloped RNA viruses of the Orthomyxoviridae family. While both of these viruses cause seasonal flu epidemics, Influenza A virus is responsible for majority of them and may also cause pandemics.

Respiratory Syncytial Virus (RSV) is also an enveloped RNA virus and belongs to Paramyxoviridae family. RSV mostly causes lower respiratory tract infections with cold-like symptoms in healthy individuals, but it may also cause severe respiratory infections in some.

Flu-RSV RQ Kit is a ready-to-use One-Step Multiplex Real-Time RT-PCR assay for the simultaneous detection of Influenza A virus, Influenza B virus and RSV.

### Advantages of Flu-RSV RQ Kit

#### Ready to Use

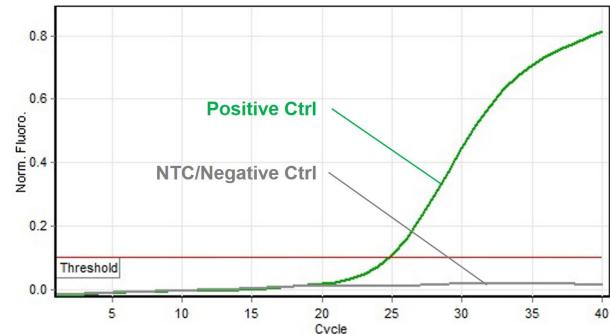
The Flu-RSV Mix contains all necessary reagents for One-Step Real-Time RT-PCR and is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample RNA. Results are viewed in Green/FAM, Yellow/VIC, Orange/ROX and Red/Cy5 channels.

#### Internal Control

Kit also contains reagents for the detection of RNase P as Internal Control which is detected in Orange/ROX channel. Internal Control prevents false negative results due to extraction failure, reaction inhibition or setup errors.

#### Kit contents

Flu-RSV Mix	PCR Master Mix for the detection of Flu A, Flu B and RSV	360µl
Positive Ctrl	Positive Control for Flu A, B and RSV	100µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical Controls graph in Red channel for Rotor-Gene

#### Kit Specifications

Analytical Sensitivity	10 copies/µl for Influenza A virus 10 copies/µl for Influenza B virus 9 copies/µl for RSV
Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Multiplex (FAM, VIC, ROX, Cy5)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

## Detection and Quantitation of Hepatitis B Virus (HBV)

Hepatitis B, a viral infection with Hepatitis B Virus (HBV) is a major global health issue. About 300 million people are infected worldwide. HBV also contributes to an estimated 800,000 deaths every year. In recent years, assessing the level of circulating virus in blood has been regarded as the most reliable tool for disease monitoring and patient management including clinical staging and pretreatment evaluation, monitoring the success of antiviral therapy and detection of emerging drug-resistant viral strains.

HBV RQ Kit provides a ready-to-use Real-Time PCR assay for the detection and quantitation of HBV DNA.



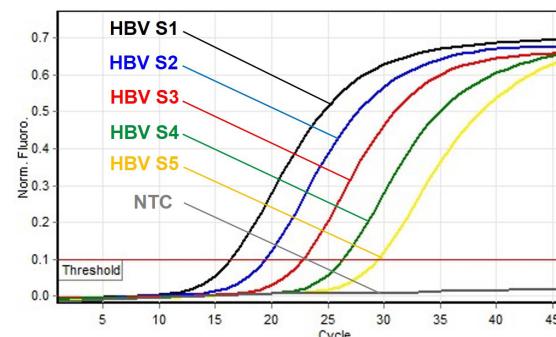
### Advantages of HBV RQ Kit

#### Ready to Use

The HBV Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM and Yellow/VIC channels.

#### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.



Typical HBV graph in Green channel for Rotor-Gene

#### Kit contents

HBV Mix	PCR Master Mix for the detection of HBV and Internal Control	360µl
HBV Standards	5 quantitation Standards (100,000 to 10 IU/µl)	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

#### Kit Specifications

Analytical Sensitivity	0.15 IU/µl for the cloned target
Linear Range	10 million IU/µl to 1 IU/µl
Reaction Type	Quantitative Real-time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# HCV Genotype RG Kit

## Detection and Genotyping of Hepatitis C Virus (HCV)

Hepatitis C Virus (HCV) is the major cause of cirrhosis and hepatocellular carcinoma. So far 6 major genotypes and more than 80 subtypes have been identified.

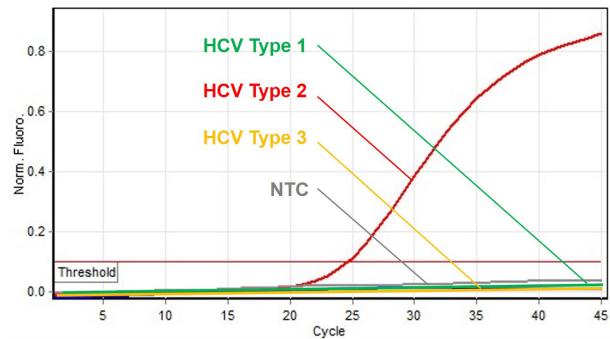
The gold standard method for HCV genotyping is sequencing and phylogenetic studies. Since this method is not feasible for routine practice in a clinical laboratory, other methods have been used for this purpose which most of them are PCR-based.

HCV Genotype RG Kit provides a ready-to-use One-Step Real-Time RT-PCR assay for the detection and differentiation of HCV types 1, 2 and 3.

### Advantages of HCV Gen RG Kit

#### Ready to Use

The HCV Gen Mix contains all necessary reagents for Real-Time One-Step RT-PCR and is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample RNA. Results can be viewed in Green/FAM, Yellow/VIC and Red/Cy5 channels.



HCV Controls in Red Channel for Rotor-Gene

#### Kit contents

HCV Gen Mix RG	PCR Master Mix for the detection and typing of HCV	360µl
HCV Controls	Positive Control for HCV-1, HCV-2 and HCV-3	150µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

#### Kit Specifications

Analytical Sensitivity	25 copies/µl for the cloned target
Reaction Type	Qualitative One-Step Real-Time RT-PCR
Detection Method	TaqMan probe, Multiplex (FAM, VIC, Cy5)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# HCV RQ Kit

## Detection and Quantitation of Hepatitis C Virus (HCV)

Hepatitis C Virus (HCV) is an RNA virus and an important human pathogen. It is estimated that about 60 million individuals are infected worldwide. It can cause acute and chronic hepatitis followed by liver cirrhosis and hepatocellular carcinoma.

Currently infection can be diagnosed by detection of HCV RNA in patient sample by RT-PCR, weeks to months before antibody response. In addition, monitoring viral load by the same method has become a clinical gold standard for evaluation of therapy success as well as disease progress.

HCV RQ Kit provides a ready to use One-Step Real-Time RT-PCR assay for the detection and quantitation of HCV RNA.

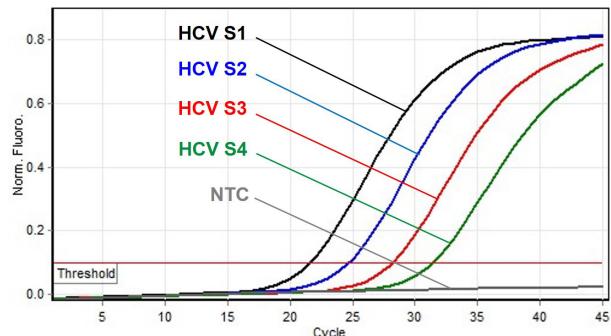
### Advantages of HCV RQ Kit

#### Ready to Use

The HCV Mix contains all necessary reagents for Real-Time One-Step RT-PCR and is ready to use; no further preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample RNA. Results can be viewed in Green/FAM and Yellow/VIC channels.

#### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.



Typical HCV graph in Green channel for Rotor-Gene

#### Kit contents

HCV Mix	PCR Master Mix for the detection of HCV and Internal Control	360µl
HCV Standards	4 quantitation Standards (50,000 to 50 IU/µl)	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

#### Kit Specifications

Analytical Sensitivity	1.5 IU/µl for the cloned target
Linear Range	2.5 million to 5 IU/µl for the cloned target
Reaction Type	One-Step Quantitative Real-Time RT-PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# — Herpes Panel RQ Kit

## Detection of CMV, EBV, HSV-1, HSV-2 and VZV

CMV, EBV, HSV-1, HSV-2 and VZV, are all members of Herpesviridae family and have double-stranded DNA genome. These viruses are among common human pathogens and involved in a wide spectrum of diseases including CNS infections.

Herpes Panel RQ Kit, provides a fast, sensitive, and also cost-effective Multiplex Real-Time PCR system for the detection of multiple viruses from Herpesviridae family (CMV, EBV, HSV-1, HSV-2 and VZV) in variety of samples.

### Advantages of Herpes Panel RQ Kit

#### Ready to Use

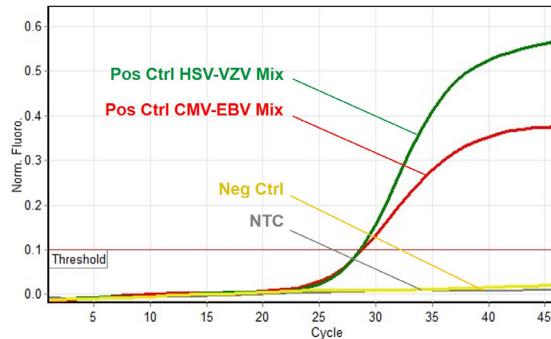
The Herpes panel Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Each sample will be examined with each of the two mixes. Results can be viewed in Green/FAM, Yellow/VIC and Orange/ROX channels.

#### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.

#### Kit contents

CMV-EBV Mix	PCR Master Mix for the detection of CMV, EBV and Internal Control	360µl
HSV-VZV Mix	PCR Master Mix for detection of HSV-1, HSV-2 and VZV	360µl
Positive Control	Positive Control	100µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical Controls graph in Green channel for Rotor-Gene

#### Kit Specifications

Analytical Sensitivity	0.5 copies/µl for CMV, HSV and 1 copy/µl for EBV and VZV
Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Multiplex (FAM, VIC, ROX)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# HHV-6 RQ Kit

## Detection and Quantitation of Human Herpes Virus 6 (HHV-6)

Human Herpesvirus 6 (HHV-6) is a double-stranded DNA virus and a member of Herpesviridae family. It comprises two distinct herpesvirus species of HHV-6A and HHV-6B. Primary infection occurs mostly in early childhood followed by a life-long latent infection. While both viruses may get reactivated later on, HHV-6B is more prone to it especially in post-transplant patients. Both viruses have also been related to nervous system complications including meningitis and encephalitis.

HHV-6 RQ Kit provides a ready-to-use Real-Time PCR assay for the detection, differentiation and quantitation of HHV-6A and HHV-6B.

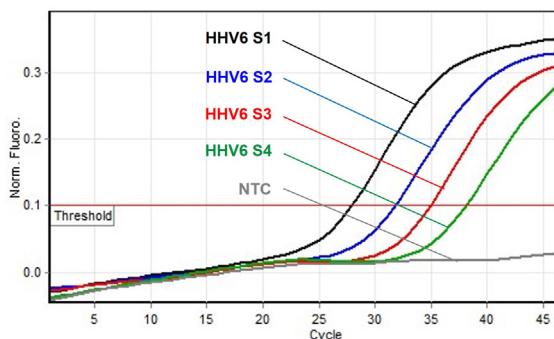
### Advantages of HHV6 RQ Kit

#### Ready to Use

The HHV-6 Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM, Yellow/VIC and Orange/ROX channels.

#### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.



Typical HHV-6A graph in Green channel for Rotor-Gene

### Kit contents

HHV6 Mix	PCR Master Mix for the detection of HHV-6A, HHV-6B and Internal Control	360µl
HHV6 Standards	4 quantitation Standards (10,000 to 10 copies/µl)	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

### Kit Specifications

Analytical Sensitivity	10 copies/µl for the cloned target
Linear Range	100 million to 10 copies/µl for the cloned target
Reaction Type	Quantitative Real-time PCR
Detection Method	TaqMan probe, Triplex (FAM, VIC, ROX)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

## Detection and Quantitation of Human Immunodeficiency Virus (HIV)

Human Immunodeficiency Virus (HIV) is a retrovirus with 2 strands of RNA as its genome, each about 9.7 kb. Infection with this virus, affects the immune system and over the time leads to Acquired Immunodeficiency Syndrome (AIDS). There are two types of HIV: HIV-1 and HIV-2. Most of worldwide cases are due to HIV-1, while HIV-2 is mostly limited to West Africa.

HIV RQ Kit provides a ready-to-use One-Step Real-Time RT-PCR assay for the detection and quantitation of HIV-1 RNA (Group M subtypes A-H; and Group N).

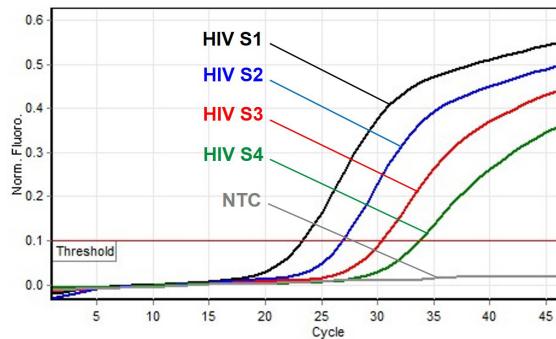
### Advantages of HIV RQ Kit

#### Ready to Use

The HIV Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample RNA. Results can be viewed in Green/FAM channel and Yellow/VIC channel.

#### Internal Control

Kit also incorporates an Internal Control, to identify possible extraction failure or PCR inhibition, preventing false negative results.



Typical HIV graph in Green channel for Rotor-Gene instrument

#### Kit contents

HIV Mix	PCR Master Mix for the detection of HIV-1 RNA and Internal Control	360µl
HIV Standards	4 quantitation Standards (50,000 to 50 IU/µl)	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

#### Kit Specifications

Analytical Sensitivity	10 IU/µl for the cloned target
Linear Range	50 million to 50 IU/µl for the cloned target
Reaction Type	Quantitative Real-Time RT-PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# HPV HR RQ3 Kit

## Detection of Human Papilloma Virus (HPV)

Human Papilloma Virus (HPV) is a non-enveloped double stranded DNA virus from papillomaviridae family. There are about 150 different types of HPV. HPV infection is considered the main cause of cervical cancer and has been linked to more than 99% of all cases. According to data linking HPV infection to cervical cancer, HPV types have been divided into three groups of High-Risk, Low-Risk and No-Risk. Currently 14 types of 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66 and 68 are considered as High-Risk and 6 types considered as Low-Risk including 6, 11, 42, 43, 44 and 53.

HPV HR RQ3 Kit provides a ready-to-use Real-Time PCR assay for the detection of HPV DNA including 14 High Risk Types of 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66 and 68 and 2 Low Risk Types of 6 and 11.

## Advantages of HPV HR RQ3 Kit

### Ready to Use

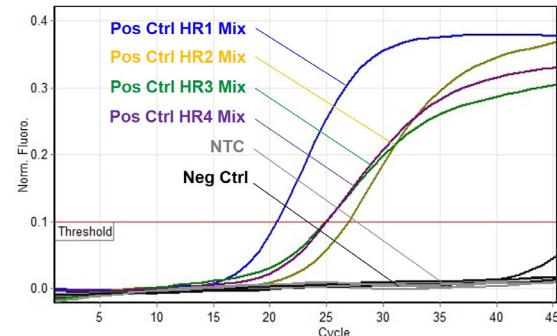
The HPV HR RQ3 Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM, Yellow/VIC and Orange/ROX channels.

### Internal Control

The PCR Mix contains primers and probe for a housekeeping gene as Internal Control that is detected in Orange/ROX channel. Internal Control prevents false negative results due to extraction failure, reaction inhibition or setup errors.

### Kit contents

HPV HR1-4 Mixes	PCR Master Mixes for the detection and differentiation of 16 HPV types	480µl
Positive Control	Positive Control	100µl
Negative Control	Negative Control	100µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical HPV HR graph in Green channel for Rotor-Gene

### Kit Specifications

Analytical Sensitivity	50 copies/µl for the cloned target
Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Multiplex (FAM, VIC, ROX)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# — HPV HR RQ4 Kit

## Detection of Human Papilloma Virus (HPV)

Human Papilloma Virus (HPV) is a non-enveloped double stranded DNA virus from papillomaviridae family. There are about 150 different types of HPV. HPV infection is considered the main cause of cervical cancer and has been linked to more than 99% of all cases. According to data linking HPV infection to cervical cancer, HPV types have been divided into three groups of High-Risk, Low-Risk and No-Risk. Currently 14 types of 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66 and 68 are considered as High-Risk and 6 types considered as Low-Risk including 6, 11, 42, 43, 44 and 53.

HPV HR RQ4 Kit provides a ready-to-use Real-Time PCR assay for the detection of HPV DNA including 14 High Risk Types of 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66 and 68 and 2 Low Risk Types of 6 and 11.

## Advantages of HPV HR RQ4 Kit

### Ready to Use

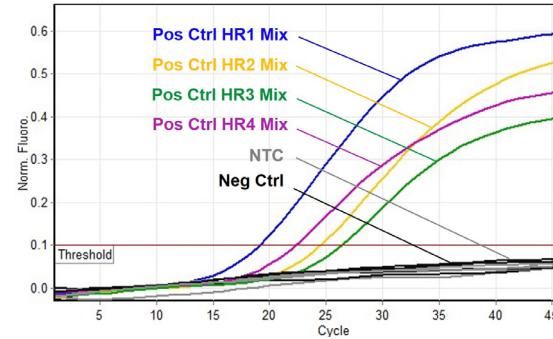
The HPV HR RQ4 Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM, Yellow/VIC, Orange/ROX and Red/Cy5 channels.

### Internal Control

The PCR Mix contains primers and probe for a housekeeping gene as Internal Control that is detected in Orange/ROX channel. Internal Control prevents false negative results due to extraction failure, reaction inhibition or setup errors.

### Kit contents

HPV HR1-4 Mixes	PCR Master Mixes for the detection and differentiation of 16 HPV types	480µl
Positive Control	Positive Control	100µl
Negative Control	Negative Control	100µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical HPV HR graph in Green channel for Rotor-Gene

### Kit Specifications

Analytical Sensitivity	50 copies/µl for the cloned target
Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Multiplex (FAM, VIC, ROX, Cy5)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# HSV 1/2 RQ Kit

## Detection and Quantitation of Herpes Simplex Virus (HSV)

Human Herpes Virus type 1 and 2 (HHV-1, HHV-2) known as Herpes Simplex Virus 1 and 2 (HSV-1, HSV-2) are large, enveloped DNA viruses with a genome of about 150 kbp double stranded DNA. HSV is a ubiquitous pathogen and capable of causing a variety of infections which are typically benign in adults. Following an active infection, it establishes latency in the sensory and autonomic ganglia of the nervous system. It can be reactivated with several potential triggers like stress. If reactivated, retrograde transmission of the virus from the peripheral site to the CNS along nerve axons can result in CNS infection, making HSV the most common cause of viral encephalitis. In such cases, prompt laboratory diagnosis of HSV infection is essential to answer timely patient management and possible initiation of antiviral therapy, and reduction of mortality rates. Quantitative PCR assays can estimate the extent of viral replication in the CNS and would be helpful as a prognostic marker and aid in monitoring the efficacy of antiviral treatments.

HSV 1/2 RQ Kit provides a ready-to-use Real-Time PCR assay for the detection and quantitation of HSV-1 and HSV-2.

### Advantages of HSV 1/2 RQ Kit

#### Ready to Use

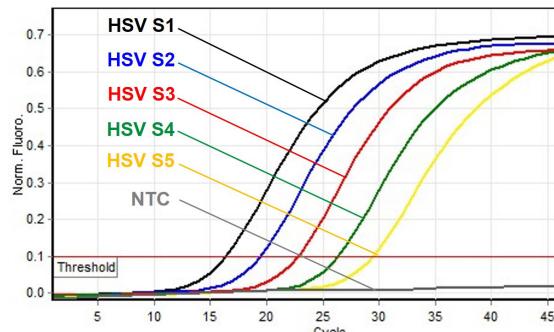
The HSV Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM channel and Yellow/VIC channels.

#### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.

#### Kit contents

HSV Mix	PCR Master Mix for the detection of HSV-1/2 and Internal Control	360µl
HSV Standards	4 quantitation Standards (10,000 to 10 copies/µl)	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical HSV graph in Green channel for Rotor-Gene

#### Kit Specifications

Analytical Sensitivity	0.5 copies/µl for the cloned target
Linear Range	1 million to 2 copies/µl for the cloned target
Reaction Type	Quantitative Real-Time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# — HSV Type RQ Kit

## Detection and Differentiation of Herpes Simplex Virus (HSV)

Human Herpes Virus type 1 and 2 (HHV-1, HHV-2) known as Herpes Simplex Virus 1 and 2 (HSV-1, HSV-2) are large, enveloped DNA viruses with a genome of about 150 kbp double stranded DNA. HSV is a ubiquitous pathogen and capable of causing a variety of infections. While most HSV infections in adults are usually benign, HSV is the leading cause of viral encephalitis and genital herpes which is one of the most prevalent sexually transmitted diseases (STDs). Despite overlapping clinical manifestations, HSV-1 and HSV-2 differ in terms of severity, clinical outcomes, mortality, frequency of reactivation, response to antiviral therapy, and drug resistance. Therefore, defining the type is clinically important and routinely recommended. Classically, HSV-1 and HSV-2 infections are associated with oral or genital diseases, respectively. However, this distinction is not absolute, as both HSV-1 and HSV-2 can infect the skin, mucous membranes and visceral organs. Notably, HSV-1 has become the predominant cause of genital ulcers in some developed countries. Therefore, HSV-1 and HSV-2 detection and typing based on clinical symptoms is not reliable and requires laboratory tests. This is particularly critical in cases of viral encephalitis, where timely diagnosis is crucial for effective patient management. HSV Type RQ Kit provides a fast and highly sensitive Real-Time PCR assay for the detection and typing of HSV-1 and HSV-2.

## Advantages of HSV Type RQ Kit

### Ready to Use

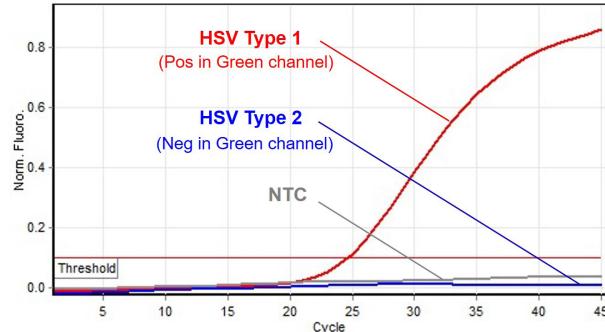
The HSV Type Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM, Yellow/VIC and Orange/ROX channels.

### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.

### Kit contents

HSV Type Mix	PCR Master Mix for the detection and differentiation of HSV-1, HSV-2 and Internal Control	360 $\mu$ l
HSV Controls	Positive Control for HSV-1 and HSV-2	150 $\mu$ l
Internal Control	Internal Control DNA	250 $\mu$ l
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical HSV Controls graph in Green channel for Rotor-Gene

### Kit Specifications

Analytical Sensitivity	0.5 copies/ $\mu$ l for the cloned target
Reaction Type	Qualitative Real-Time PCR
Detection Method	TaqMan probe, Triplex (FAM, VIC, ROX)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25 $\mu$ l.

# HTLV RQ Kit

## Detection and Quantitation of Human T-cell Lymphotropic Virus I (HTLV-I)

Human T-cell Lymphotropic Virus I (HTLV-I) is the first human retrovirus discovered (1979). Two years later HTLV-II was also discovered. About 15 to 20 million people are infected with these viruses worldwide. Transmission is mostly through sexual contact, breastfeeding, transfusion, transplant and intravenous drug use. Within the body, infection spreads slowly through virological synapses from cell to cell and takes 20-50 years to develop symptoms. Infection with HTLV-I may lead to leukemia/lymphoma or myelopathy while HTLV-II causes mild neurologic disorders or chronic pulmonary infection. Disease progress and pathogenesis depend partly on proviral load and monitoring that could be beneficial for patient management.

HTLV-I RQ Kit provides a ready-to-use Real-Time PCR assay for the detection and quantitation of HTLV-I provirus and cellular titer, using the Albumin gene as a reference. Additionally, the Albumin gene serves as an internal control to monitor extraction quality and reduce the risk of false-negative results.

### Advantages of HTLV RQ Kit

#### Ready to Use

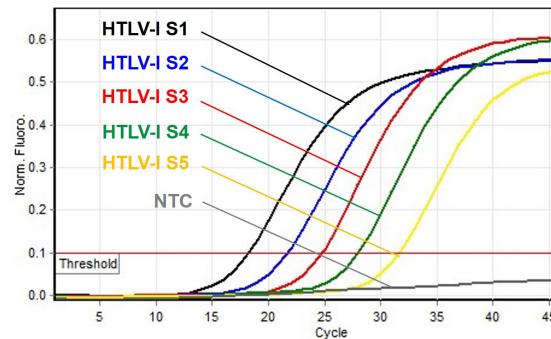
The HTLV-I Mix and Albumin Mix contain all necessary reagents for Real-Time PCR and are ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results for HTLV-I can be viewed in Green/FAM channel.

#### Internal Control

Kit also contains a second set of PCR Mix and Standards for Albumin as External Control and normalizer. Results can be viewed in Yellow/VIC channel and provides sample cellular load to normalize HTLV-I titer. This Control also prevents false negative results due to extraction failure, PCR inhibition or setup errors.

#### Kit contents

HTLV Mix	PCR Master Mix for the detection of HTLV-I	480 $\mu$ l
Albumin Mix	PCR Master Mix for the detection of Albumin	480 $\mu$ l
HTLV-Albumin Standards	5 quantitation Standards (100,000 to 10 copies/ $\mu$ l)	250 $\mu$ l
Water	PCR grade Water	200 $\mu$ l
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical HTLV-I Graph in Green channel for Rotor-Gene

#### Kit Specifications

Analytical Sensitivity	2 copies/ $\mu$ l for HTLV-I and 1 copy/ $\mu$ l for Albumin
Linear Range	1 million to 10 copies/ $\mu$ l for the cloned target
Reaction Type	Quantitative Real-Time PCR
Detection Method	TaqMan probe, Singleplex (FAM, VIC)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25 $\mu$ l.

## Detection and Quantitation of JC Virus (JCV)

JC Virus (JC) is a member of Polyomavirus genus, characterized by a double-stranded DNA genome. BK virus also belongs to this genus. Early infection occurs in early childhood and without clinical symptoms. Then JCV establishes a lifelong infection usually in kidney, central nervous system or lymphocytes. Approximately 80% of the adult population is infected with this virus without noticing it. However, JCV may lead to significant consequences in patients with Immunodeficiency or severely weakened immune systems such as those with HIV/AIDS, lymphoma, multiple sclerosis (MS), or transplant recipients. In these cases, JCV reactivation may result in a serious brain infection called progressive multifocal leukoencephalopathy (PML). Therefore, it is crucial to monitor JCV titer in these high-risk groups.

JC RQ Kit provides a ready-to-use Real-Time PCR assay for the detection and quantitation of JCV DNA.

## Advantages of JC RQ Kit

### Ready to Use

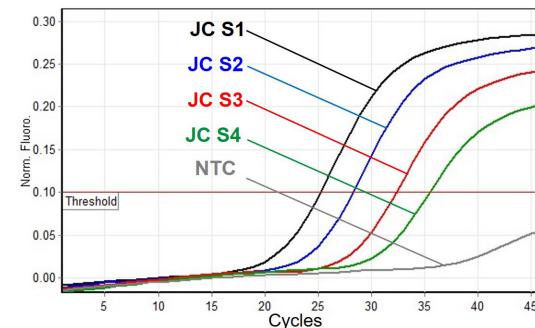
The JC Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM and Yellow/VIC channels.

### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.

### Kit contents

JC Mix	PCR Master Mix for the detection of JC Virus and Internal Control	360 $\mu$ l
JC Standards	4 quantitation Standards (100,000 to 100 copies/ $\mu$ l)	150 $\mu$ l
Internal Control	Internal Control DNA	250 $\mu$ l
Water	PCR grade Water	200 $\mu$ l
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical JC graph in Green channel for Rotor-Gene

### Kit Specifications

Analytical Sensitivity	5 copies/ $\mu$ l for the cloned target
Linear Range	100 million to 50 copies/ $\mu$ l for the cloned target
Reaction Type	Quantitative Real-time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25 $\mu$ l.

# JC-BK RQ Kit

## Detection and Quantitation of JC-BK Virus

JC Virus (JCV) and BK Virus (BKV) are members of Polyomavirus genus, characterised by a double-stranded DNA genome. Early infection with these two viruses occurs in early childhood and is asymptomatic. JCV establishes a lifelong infection usually in the kidneys, central nervous system or lymphocytes. Approximately 80% of the adult population are infected with these viruses without being aware of it. However, they may lead to significant consequences in patients with Immunodeficiency or severely weakened immune systems such as those with HIV/AIDS, lymphoma, multiple sclerosis (MS), or transplant recipients. In these cases, JCV reactivation may result in a serious brain infection called progressive multifocal leukoencephalopathy (PML). Therefore, it is crucial to monitor JCV titer in these high-risk groups.

BKV can cause significant consequences in renal or bone marrow transplant patients including polyomavirus associated nephropathy (PVAN) and graft loss. Quantitative monitoring of BKV load in plasma or urine of transplant recipients is essential. A viral load of 10,000 copies/ml in plasma or 10 million copies/ml in urine, for 3 weeks or more is an early indication of PVAN.

JC-BK RQ Kit provides a ready-to-use Real-Time PCR assay for the detection and quantitation of JC and BK viruses DNA.

### Advantages of JC-BK RQ Kit

#### Ready to Use

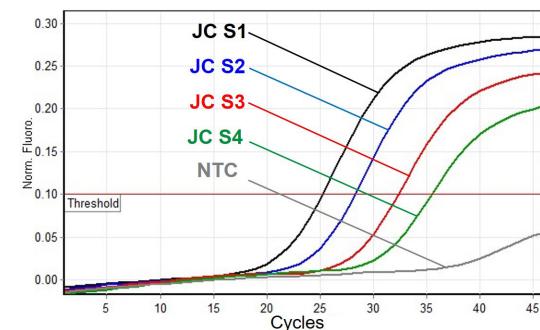
The JC-BK Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM and Yellow/VIC and Red/Cy5 channels.

#### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.

#### Kit contents

JC-BK Mix	CR Master Mix for the detection of JC-BK and Internal Control	360µl
JC-BK Standards	4 quantitation Standards (10,000 to 10 copies/µl)	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical JC-BK graph in Green channel for Rotor-Gene

#### Kit Specifications

Analytical Sensitivity	2 copies/µl for the cloned target
Linear Range	10 million to 100 copies/µl for the cloned target
Reaction Type	Quantitative Real-time PCR
Detection Method	TaqMan probe, Multiplex (FAM, VIC, Cy5)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# Leishmania RQ Kit

## Detection of Leishmania

Leishmania is a parasitic protozoan that causes Leishmaniasis in vertebrates. Over 30 species of Leishmania have been known but some of them are more important as they can infect humans, such as *L. major*, *L. tropica*, *L. aethiopica*, *L. donovani* and *L. infantum*. Phlebotomine sand flies are the intermediate host for Leishmania. Leishmaniasis is most prevalent in tropical and subtropical regions. Based on clinical symptoms, the three main phenotypic categories of disease are Cutaneous Leishmaniasis (CL), Visceral Leishmaniasis (VL) and Mucocutaneous Leishmaniasis (MCL). The infection could be asymptomatic or present with various clinical manifestations. Cutaneous Leishmaniasis is the most prevalent type of infection with Leishmaniasis. Since the symptoms of Visceral Leishmaniasis are similar to some common diseases such as tuberculosis, typhoid and malaria, rapid and specific diagnosis of this parasite is crucial for effective treatment.

Leishmania RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of Leishmania DNA.

## Advantages of Leishmania RQ Kit

### Ready to Use

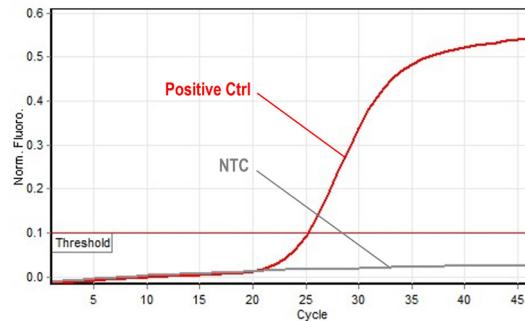
The Leishmania Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM channel.

### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure, PCR inhibition or setup errors, preventing false negative results. Internal Control is detected in Yellow/VIC channel.

### Kit contents

Leishmania Mix	PCR Master Mix for the detection of Leishmania	360µl
Positive Ctrl	Positive Control	100µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical Controls graph in Green channel for Rotor-Gene

### Kit Specifications

Analytical Sensitivity	4 copies/µl for the cloned target
Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

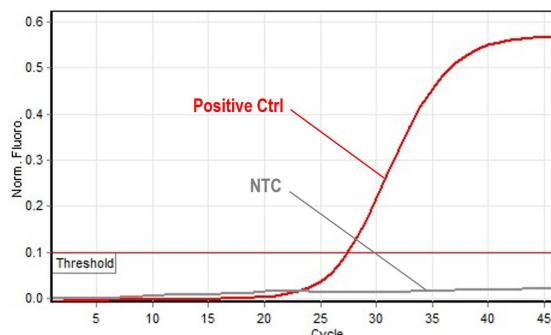
# Measles RQ Kit

## Detection of Measles Virus (MeV)

Measles virus is (MeV) a member of the Paramyxoviridae family with a single-stranded RNA genome. Measles is a highly contagious viral disease which primarily transmitted through respiratory droplets. Measles typically begins with flu-like symptoms, including fever, cough and runny nose, followed by the appearance of a characteristic red rash.

Although measles is usually self-limiting, it can lead to severe complications such as pneumonia, encephalitis and death, particularly in young children and immunocompromised individuals.

Measles RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of MeV RNA.



Typical Measles graph in Green channel for Rotor-Gene

## Advantages of Measles RQ Kit

### Ready to Use

The Measles Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM and Yellow/VIC channels.

### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.

### Kit contents

Measles Mix	PCR Master Mix for the detection of Measles and Internal Control	360µl
Measles Pos Control	Positive Control	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

### Kit Specifications

Analytical Sensitivity	5 copies/µl for the cloned target
Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# Mpox RQ Kit

## Detection of Mpox Virus

Mpox, formerly known as monkeypox, is a zoonotic viral disease caused by the mpox virus, a member of the Orthopoxvirus genus. While the symptoms of mpox are generally mild and self-limiting, severe cases can occur, particularly in children, pregnant individuals and those with weakened immune systems. The disease presents with flu-like symptoms such as fever, headache, muscle aches and swollen lymph nodes, followed by a distinctive rash that progresses through various stages, including macules, papules and vesicles.

Mpox RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of Mpox virus DNA.

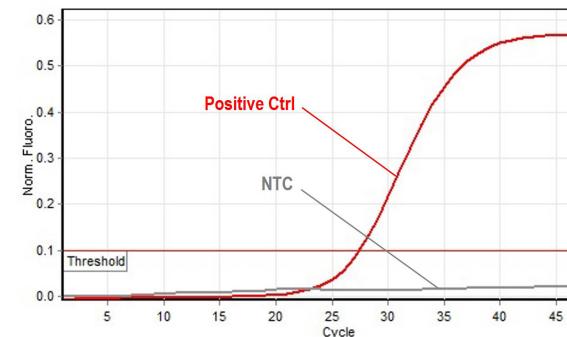
## Advantages of Mpox RQ Kit

### Ready to Use

The Mpox Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM and Yellow/VIC channels.

### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.



Typical Mpox graph in Green channel for Rotor-Gene

## Kit contents

Mpox Mix	PCR Master Mix for the detection of Mpox and Internal Control	360µl
Mpox Pos Control	Positive Control	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

## Kit Specifications

Analytical Sensitivity	15 copies/µl for the cloned target
Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

## Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# Mumps RQ Kit

## Detection of Mumps Virus

Mumps is an acute viral illness caused by the Mumps virus, a member of the Paramyxoviridae family with a single-stranded RNA genome. It is primarily transmitted through respiratory droplets and is characterized by painful swelling of the salivary glands, particularly the parotid glands. In some cases, mumps can lead to serious complications including meningitis, encephalitis, pancreatitis, hearing loss and some other complications. Accurate and timely diagnosis is essential for effective disease management and outbreak control.

Mumps RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of MuV RNA.

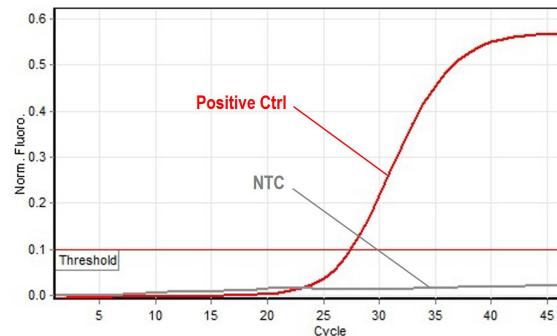
## Advantages of Mumps RQ Kit

### Ready to Use

The Mumps Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM and Yellow/VIC channels.

### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.



Typical Mumps graph in Green channel for Rotor-Gene

## Kit contents

Mumps Mix	PCR Master Mix for the detection of Mumps and Internal Control	360µl
Mumps Pos Control	Positive Control	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

## Kit Specifications

Analytical Sensitivity	15 copies/µl for the cloned target
Reaction Type	Qualitative Real-time RT-PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

## Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# Mycoplasma RQ Kit

## Detection and differentiation of *Mycoplasma hominis* and *Mycoplasma genitalium*

Mycoplasma species are unique bacteria characterized by their very small size and lack of a cell wall, making them intrinsically resistant to many common antibiotics such as beta-lactams. Among the clinically important species, *Mycoplasma hominis* and *Mycoplasma genitalium* are important causes of sexually transmitted and reproductive tract infections.

Since, culturing these species is difficult and time-consuming, molecular diagnostic methods particularly PCR and Real-Time PCR are recognized as the most reliable, rapid, sensitive, and accurate approaches for the detection.

Mycoplasma RQ Kit provides a ready-to-use Real-Time PCR assay for detection and differentiation of *Mycoplasma hominis* and *Mycoplasma genitalium*.

### Advantages of Mycoplasma RQ Kit

#### Ready to Use

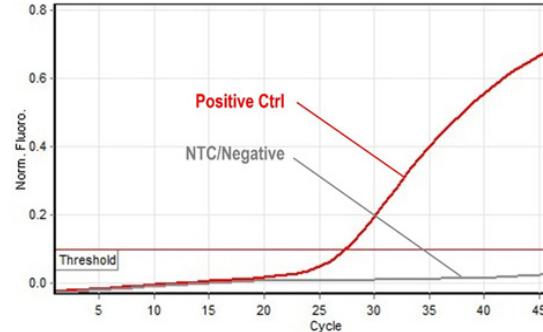
The Mycoplasma Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample. Results can be viewed in Green/FAM, Orange/ROX and Yellow/VIC channels.

#### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.

#### Kit contents

Mycoplasma Mix	PCR Master mix for the detection of <i>Mycoplasma hominis</i> and <i>Mycoplasma genitalium</i>	360µl
Pos Control	Positive Control	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical Mycoplasma genitalium graph in Green channel for Rotor-Gene

#### Kit Specifications

Analytical Sensitivity	15 copies/µl for the cloned target
Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Multiplex (FAM, ROX, VIC)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

## Detection of Nocardia Species

Nocardia is a genus of Gram-positive, branching, aerobic bacteria commonly found in soil. It is an opportunistic pathogen causing nocardiosis, which affects mainly immunocompromised but also about 40% of immunocompetent patients individuals. Infection occurs through inhalation or skin entry, involving the lungs, skin, or other organs, with symptoms such as cough, fever, chest pain, weight loss, and skin lesions. Out of 131 named species, at least 54 are pathogenic to humans, ranking Nocardia third among genera with the most pathogenic species. While culture remains the gold standard for detection, its slow growth (2–7 days) limits utility in severe cases, where PCR-based methods are preferred for rapid and accurate diagnosis.

Nocardia RG Kit provides a ready-to-use Real-Time PCR assay for detection of 11 most prevalent Nocardia species.

## Advantages of Nocardia RG Kit

### Ready to Use

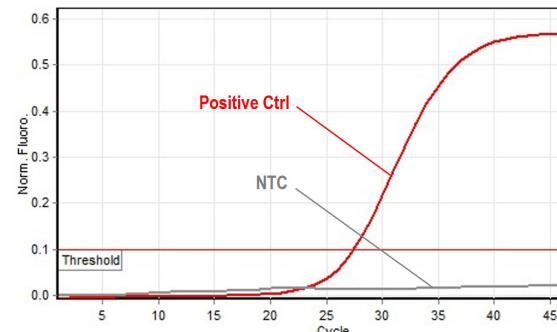
The Nocardia Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM and Yellow/VIC channels.

### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.

### Kit contents

Nocardia Mix	PCR Master Mix for the detection of Nocardia	360µl
Nocardia Pos Control	Positive Control	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical Nocardia graph in Green channel for Rotor-Gene

### Kit Specifications

Analytical Sensitivity	15 copies/µl for the cloned target
Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# Parvovirus B19 RQ Kit

## Detection and Quantitation of Parvovirus B19

Parvovirus B19 is a member of Parvoviridae family with a non-enveloped icosahedral capsid and single-stranded DNA genome. This virus causes erythema infectiosum, also known as Fifth disease, which is more common in children and usually presents with mild symptoms, such as a rash on the cheeks. The main transmission route is through respiratory droplets, but it can also be transmitted to the fetus during pregnancy. Since fetal infection can lead to serious consequences including fetal loss, early diagnosis during pregnancy is important.

Parvovirus B19 RQ Kit provides a ready-to-use Real-Time PCR assay for the detection and quantitation of Parvovirus B19 DNA.

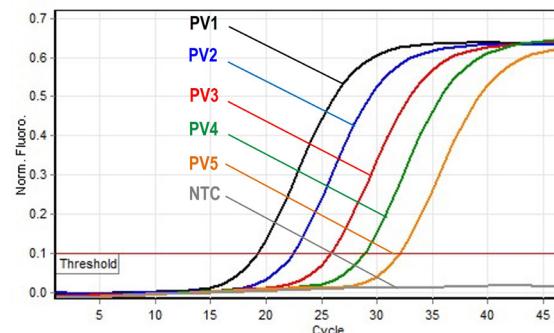
## Advantages of Parvovirus B19 RQ Kit

### Ready to Use

The PV-B19 Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM and Yellow/VIC channels.

### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.



Typical Parvovirus B19 graph in Green channel for Rotor-Gene

### Kit contents

PV-B19 Mix	PCR Master Mix for the detection of Parvovirus B19 and Internal Control	360µl
PV Standards	5 quantitation Standards (100,000 to 10 copies/µl)	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

### Kit Specifications

Analytical Sensitivity	4 copies/µl for the cloned target
Linear Range	10 million to 10 copies/µl for the cloned target
Reaction Type	Quantitative Real-time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# — Resp I RQ Kit

## Detection of SARS-CoV-2, Influenza A/B and Respiratory Syncytial Viruses

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), also known as the COVID-19 virus, is an enveloped virus with a single-stranded RNA genome that leads to respiratory illnesses.

Human influenza A and B viruses are enveloped RNA viruses belonging to the Orthomyxoviridae family. While both cause seasonal flu epidemics, influenza A virus is responsible for the majority of cases and has the potential to trigger pandemics.

Respiratory Syncytial Virus (RSV) is an enveloped RNA virus from the Paramyxoviridae family. RSV mostly causes lower respiratory tract infections with cold-like symptoms in healthy individuals but can lead to severe respiratory infections in certain populations.

Resp I RQ kit provides a ready-to-use One-Step Multiplex Real-Time RT-PCR assay for the simultaneous detection of influenza A virus, influenza B virus, RSV and SARS-CoV-2 RNA.



### Advantages of Resp I RQ Kit

#### Ready to Use

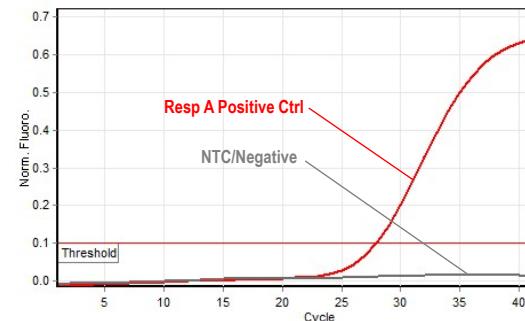
The Resp I Mix contains all necessary reagents for RT-PCR and is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample RNA. Results are viewed in Green/FAM, Yellow/VIC, Orange/ROX and Red/Cy5 channels.

#### Internal Control

Kit also contains reagents for the detection of RNase P as Internal Control which is detected in Orange/ROX channel. Internal Control prevents false negative results due to the extraction failure, reaction inhibition or setup errors.

#### Kit contents

Resp I Mix	PCR Master Mix for the detection of SARS-CoV-2, Flu A, Flu B, RSV and RNase P	360µl
Resp I Pos Ctrl	Positive Control for SARS-CoV-2, Flu A, Flu B and RSV	100µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical Controls graph in Green channel for Rotor-Gene

#### Kit Specifications

Analytical Sensitivity	13 copies/µl for SARS-CoV-2, 10 copies/µl for Influenza A virus, 10 copies/µl for Influenza B virus and 9 copies/µl for RSV
Reaction Type	Qualitative Real-time RT-PCR
Detection Method	TaqMan probe, Multiplex (FAM, VIC, ROX, Cy5)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# — Resp II RQ Kit

## Detection of SARS-CoV-2, Influenza A/B virus, Respiratory Syncytial Virus and Human Parainfluenza Viruses

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), also known as the COVID-19 virus, is an enveloped virus with a single-stranded RNA genome that leads to respiratory illnesses.

Human influenza A and B viruses are enveloped RNA viruses belonging to the Orthomyxoviridae family. While both cause seasonal flu epidemics, influenza A virus is responsible for the majority of cases and has the potential to trigger pandemics.

Respiratory Syncytial Virus (RSV) is an enveloped RNA virus from the Paramyxoviridae family. RSV mostly causes lower respiratory tract infections with cold-like symptoms in healthy individuals but can lead to severe respiratory infections in certain populations.

Human parainfluenza viruses (HPIV) are single-stranded RNA viruses classified under the Paramyxoviridae family. These viruses are divided into four distinct types HPIV-1, HPIV-2, HPIV-3 and HPIV-4, each associated with different clinical symptoms and varying degrees of severity. Signs and symptoms are similar to common cold, but it can also cause more serious infection especially in children.

Resp II RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of SARS-CoV-2, influenza A virus, influenza B virus, RSV and HPIV types 1 to 4 RNA.

### Advantages of Resp II RQ Kit

#### Ready to Use

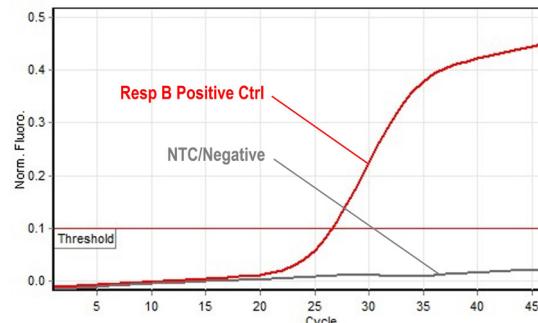
The Resp A and Resp B Mix contains all necessary reagents for Real-Time PCR and are ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample RNA. Results can be viewed in channels Green/FAM, Yellow/VIC, Orange/ROX, Red/Cy5 channels.

#### Internal Control

Kit also contains reagents for the detection of RNase P as an Internal Control which is detected in Orange/Rox channel. IC prevents false negative results due to extraction failure, reaction inhibition or setup error.

#### Kit contents

Resp A Mix	PCR Master Mix for the detection of SARS-CoV-2, Influenza A/B, RSV and Internal Control	360µl
Resp B Mix	PCR Master Mix for the detection of HPIV-1 to 4 and Internal Control	360µl
Resp A Pos Control	Positive Control for SARS-CoV-2, Flu A/B and RSV	150µl
Resp B Pos Control	Positive Control for HPIV-1 to 4	150µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical Controls graph with Resp B Mix in Yellow channel for Rotor-Gene

#### Kit Specifications

Analytical Sensitivity	8-14 copies/µl based on each virus
Reaction Type	Quantitative Real-time RT-PCR
Detection Method	TaqMan probe, Multiplex (FAM, VIC, ROX, Cy5)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

## Detection of Respiratory Syncytial Virus (RSV)

RSV is a Respiratory Syncytial Virus (RSV) is a single-stranded RNA virus of the Paramyxoviridae family. In healthy individuals it causes respiratory tract infections with cold-like symptoms, but it may cause severe respiratory infections in young children, elderly and immunocompromised patients.

RSV RQ Kit provides a ready-to-use Real-Time RT-PCR assay for the detection of RSV RNA.

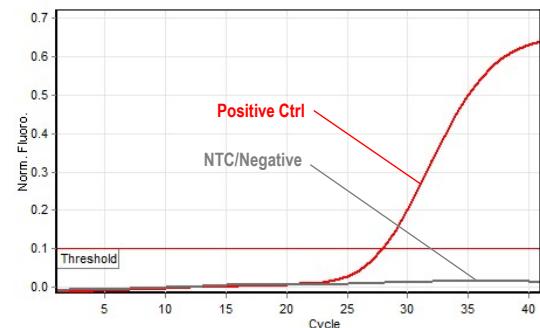
### Advantages of RSV RQ Kit

#### Ready to Use

The RSV Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample RNA. Results can be viewed in Green/FAM and Yellow/VIC channels.

#### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.



Typical RSV graph in Green channel for Rotor-Gene

#### Kit contents

RSV Mix	PCR Master Mix for the detection of RSV and Internal Control	360µl
RSV Pos Control	Positive Control	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

#### Kit Specifications

Analytical Sensitivity	9 copies/µl for the cloned target
Reaction Type	Qualitative Real-time RT-PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# — STI-3 RQ Kit

## Detection of 3 Sexually Transmitted Infections (STI)

Sexually Transmitted Infections (STIs) represent a significant global public health challenge. Chlamydia trachomatis (CT), Neisseria gonorrhoeae (NG) and Mycoplasma genitalium (MG) rank among the most widespread STIs worldwide. A notable aspect of these bacterial infections is their tendency to remain asymptomatic in many affected individuals. Consequently, delayed detection often occurs, leading to postponed treatment initiation. This delay amplifies the risk of severe and potentially irreversible health consequences. Pelvic inflammatory diseases, salpingitis and epididymitis are among the complications, all of which have the potential risk of infertility.

STI-3 Kit provides a ready-to-use Multiplex Real-Time PCR assay for the detection of CT, NG and MG.

### Advantages of STI RQ Kit

#### Ready to Use

The STI Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM, Yellow/VIC, Orange/ROX and Red/Cy5 channels.

#### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.

#### Kit contents

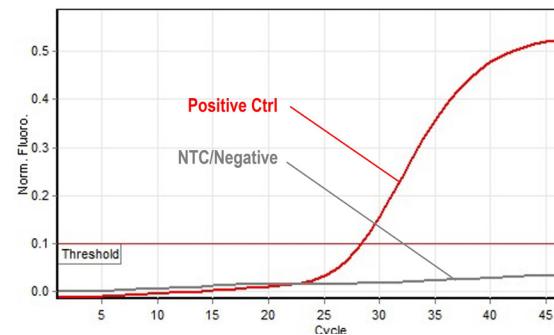
STI Mix	PCR Master Mix for the detection of CT, NG, MG and Internal Control	360µl
STI Pos Ctrl	Positive Control for all targets	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

#### Kit Specifications

Analytical Sensitivity	2-4 copies/µl for the cloned target
Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Multiplex (FAM, VIC, ROX, Cy5)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.



Typical Controls graph in Green channel for Rotor-Gene

## Detection of 7 Sexually Transmitted Infections (STI)

Sexually Transmitted Infections (STIs) represent a significant global public health challenge. *Chlamydia trachomatis*, *Neisseria gonorrhoeae*, *Mycoplasma genitalium*, *Ureaplasma Urealyticum*, *Ureaplasma parvum*, *Trichomonas vaginalis* and *Mycoplasma hominis* rank among the most widespread STIs worldwide. A notable aspect of these infections is their tendency to remain asymptomatic in many affected individuals. Consequently, delayed detection often occurs, leading to postponed treatment initiation. This delay amplifies the risk of severe and potentially irreversible health consequences. Pelvic inflammatory diseases, salpingitis, and epididymitis are among the complications, all of which have the potential risk of infertility.

STI-7 Kit provides a ready-to-use Multiplex Real-Time PCR assay for detection of the above mentioned targets.



### Advantages of STI-7 RQ Kit

#### Ready to Use

The STI Mixes contain all necessary reagents for Real-Time PCR and are ready to use; no further preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM, Yellow/VIC, Orange/ROX and Red/Cy5 channels.

#### Internal Control

Kit also incorporates an Internal Control (IC) to identify possible extraction failure or PCR inhibition and preventing false negative results.

#### Kit contents

STI Mix A	PCR Master Mix for the detection of CT, NG, MG and Internal Control	360µl
STI Mix B	PCR Master Mix for detection of TV, MH, UP, UU	360µl
STI Pos Ctrl	Positive Control	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

#### Kit Specifications

Analytical Sensitivity	5-50 copies/µl for the various cloned targets
Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Multiplex (FAM, VIC, ROX, Cy5)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

## Detection and Quantitation of *M. tuberculosis* (TB)

Tuberculosis (TB) is one of the major public health problems worldwide and results in about 2 million deaths annually. This infection is caused by a group of closely related species and subspecies of intracellular pathogens called *Mycobacterium tuberculosis* complex (MTC) including *M. tuberculosis*, *M. bovis* and *M. bovis* BCG.

While bacterial culturing is still the gold standard for TB diagnosis, Real-Time PCR is increasingly used as an alternative due to its rapid, sensitive and specific results. It also provides the highest sensitivity and widest dynamic range among other methods.

TB RQ Kit provides a ready-to-use Real-Time PCR assay for detection and quantitation of MTC DNA.

### Advantages of TB RQ Kit

#### Ready to Use

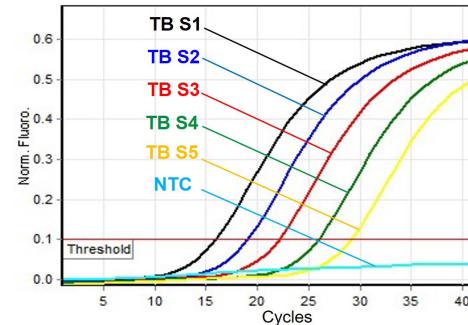
The TB Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM and yellow/VIC channels.

#### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.

#### Kit contents

TB Mix	PCR Master Mix for the detection of MTC and Internal Control	360µl
TB Standards	5 quantitation Standards (100,000 to 10 copies/µl)	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical TB graph in Green channel for RotorGene

#### Kit Specifications

Analytical Sensitivity	1 copy/µl for the cloned target
Linear Range	1 million to 10 copies/µl for the cloned target
Reaction Type	Quantitative Real-time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# Toxo RQ Kit

## Detection of *Toxoplasma gondii*

*Toxoplasma gondii* is a parasitic protozoan that causes toxoplasmosis in warm-blooded animals. Cats are the definitive host for *Toxoplasma gondii* but several intermediate hosts also exist. It is usually transmitted from infected meat or cat feces. Toxoplasmosis is asymptomatic in most humans but it causes various symptoms in immunocompromised patients, pregnant women and congenitally infected children with *Toxoplasma*.

Toxoplasma Kit provides a ready-to-use Duplex Real-Time PCR assay for the detection of *Toxoplasma* DNA.

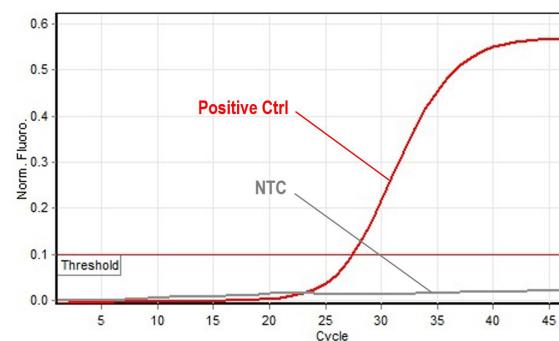
## Advantages of Toxo RQ Kit

### Ready to Use

The Toxo Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM channel.

### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results. Internal Control is detected in Yellow/VIC channel.



Typical Controls graph in Green channel for Rotor-Gene

## Kit contents

Toxo Mix	PCR Master Mix for the detection of <i>T.gondii</i> and Internal Control	360µl
Positive Control	Positive Control	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

## Kit Specifications

Analytical Sensitivity	4 copies/µl for the cloned target
Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

## Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# Trichomonas RQ Kit

## Detection of Trichomonas vaginalis

Trichomonas vaginalis is a flagellated protozoan parasite and the causative agent of trichomoniasis, one of the most common non-viral sexually transmitted infections worldwide. While many infections are asymptomatic, women may present with vaginitis, discharge, or discomfort, and men may develop mild urethritis. The infection is linked to complications such as adverse pregnancy outcomes and increased susceptibility to other STIs. Detection by traditional microscopy and culture has limited sensitivity, hence PCR method is recommended as the most accurate method for reliable detection.

Trichomonas RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of Trichomonas vaginalis.

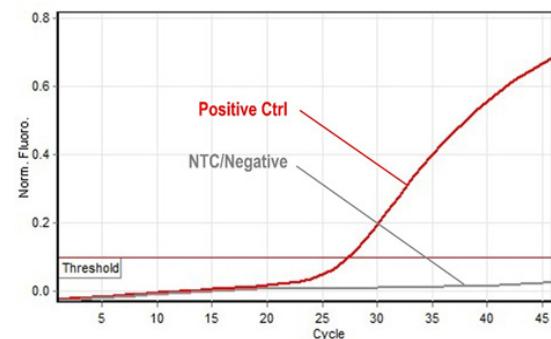
## Advantages of Trichomonas RQ Kit

### Ready to Use

The Trichomonas Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample. Results can be viewed in Green/FAM, Yellow/VIC channels.

### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.



Typical Trichomonas graph in Green channel for RotorGene

### Kit contents

Trichomonas Mix	PCR Master mix for the detection of Trichomonas vaginalis	360µl
Pos Control	Positive Control	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

### Kit Specifications

Analytical Sensitivity	15 copies/µl for the cloned target
Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

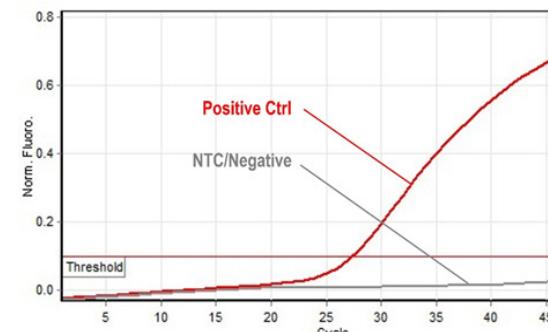
# Ureaplasma RG Kit

## Detection and Differentiation of Ureaplasma parvum and Ureaplasma urealyticum

Ureaplasma parvum and Ureaplasma urealyticum are classified under Mycoplasmataceae. These cell wall-deficient bacteria are commonly found in the urogenital tract of many individuals. Although they are often asymptomatic, in some cases they are associated with complications such as infertility, genital tract inflammation, and pregnancy-related conditions including preterm birth and chorioamnionitis.

Since, culturing Ureaplasma species is both difficult and time-consuming, molecular diagnostic methods particularly PCR and Real-Time PCR are recognized as the most reliable approaches for their detection. These techniques provide rapid, sensitive, and accurate identification, ensuring precise differentiation.

Ureaplasma RG Kit provides a ready-to-use Real-Time PCR assay for detection of Ureaplasma parvum and Ureaplasma urealyticum.



Typical Ureaplasma parvum graph in Green channel for Rotor-Gene

## Advantages of Ureaplasma RG Kit

### Ready to Use

The Ureaplasma Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM, ROX/Orange, Yellow/VIC channels.

### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure or PCR inhibition, preventing false negative results.

### Kit contents

Ureaplasma Mix	PCR Master mix for the detection of Ureaplasma parvum and Ureaplasma urealyticum	360µl
Positive Control	Positive Control	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

### Kit Specifications

Analytical Sensitivity	7.7 copies/µl for the cloned target
Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Triplex (FAM, VIC, ROX)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

## Detection and Quantitation of Varicella Zoster Virus (VZV)

Varicella Zoster Virus (VZV) is a double-stranded 125 kb DNA virus and a member of Herpesviridae family. Varicella (chickenpox) results from childhood infection. Following the initial infection, the virus remains latent in the nerve ganglia. Reactivation of the virus in adults causes herpes zoster (shingles). Infection during pregnancy may also lead to congenital defects.

VZV RQ Kit provides a ready-to-use Real-Time PCR assay for the detection and quantitation of VZV.

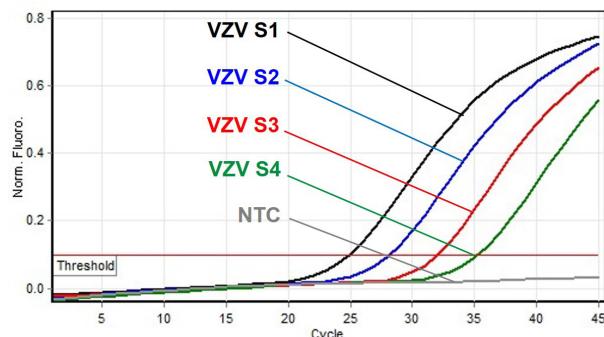
### Advantages of VZV RQ Kit

#### Ready to Use

The VZV Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM channel.

#### Internal Control

Kit also incorporates an Internal Control to identify possible extraction failure, PCR inhibition or setup errors, preventing false negative results. Internal Control is detected in Yellow/VIC channel.



Typical VZV graph in Green channel for Rotor-Gene

### Kit contents

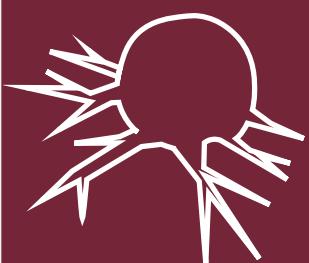
VZV Mix	PCR Master Mix for the detection of VZV and Internal Control	360µl
VZV Standards	4 quantitation Standards (10,000 to 10 copies/µl)	150µl
Internal Control	Internal Control DNA	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

### Kit Specifications

Analytical Sensitivity	4 copies/µl for the cloned target
Linear Range	100 million copies/µl to 10 copies/µl for the cloned target
Reaction Type	Quantitative Real-time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.



# Oncogenetics

# — AML1-ETO RQ Kit

## Detection and Quantitation of AML1-ETO Transcripts

AML1-ETO is the most common chromosomal aberration observed in de novo acute myeloid leukemia (AML) patients. This abnormality is results from the t(8;21) (q22;q22) translocation, which generates a fusion protein that inhibits myeloid transcription factors, there by blocking cellular differentiation. This alteration occurs in approximately 7% of adults and 12% of pediatric patients with AML.

AML1-ETO RQ Kit provides a ready-to-use Real-Time PCR assay for the detection and quantitation of AML1-ETO transcripts as well as the calculation of AML1-ETO transcript percentages.

## Advantages of AML1-ETO RQ Kit

### Ready to Use

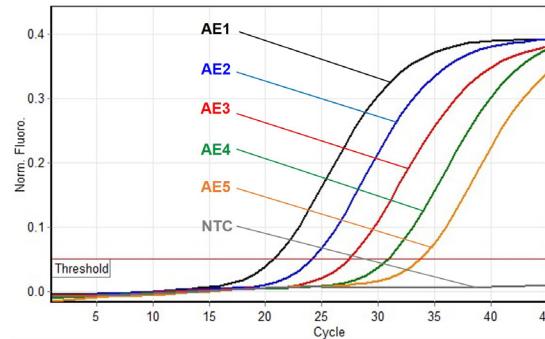
The AML1-ETO and ABL Mixes contain all necessary reagents for Real-Time PCR and are ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample cDNA. Results can be viewed in Green/FAM channel for AML1-ETO and Yellow/VIC channel for ABL.

### Control Gene

Kit also provides PCR Mix and Standards for assessment of ABL expression as the control gene. This would evaluate quality of the patient sample, RNA extraction and cDNA synthesis, preventing related false negative results.

### Kit contents

AML1-ETO Mix	PCR Master Mix for the detection of AML1-ETO transcripts	480 $\mu$ l
ABL Mix	PCR Master Mix for the detection of ABL transcripts	480 $\mu$ l
AML1-ETO Standards	5 quantitation Standards (100,000 to 10 copies / $\mu$ l)	150 $\mu$ l
ABL Standards	4 quantitation Standards (100,000 to 100 copies / $\mu$ l)	150 $\mu$ l
Water	PCR grade Water	200 $\mu$ l
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical AML1-ETO graph in Green channel for Rotor-Gene

### Kit Specifications

Analytical Sensitivity	2 copies/ $\mu$ l or 0.02% for AML1-ETO in context of 10,000 copies/ $\mu$ l of ABL transcripts
Reaction Type	Quantitative Real-Time PCR
Detection Method	TaqMan probe, Singleplex (FAM, VIC)

### Packaging

Kit is available as 24 and 48 reactions of 25 $\mu$ l.

# BCR-ABL (p190) RQ Kit

## Detection and Quantitation of BCR-ABL p190 Transcripts

The Philadelphia chromosome is an abnormality resulting from the t(9;22) translocation. Consequently, the ABL proto-oncogene on chromosome 9 fuses with the BCR gene on chromosome 22. This fusion produces the BCR-ABL protein, primarily 210 kDa (b2a2 or b3a2) or 190 kDa (e1a2), which has constitutively active tyrosine kinase activity, promoting cell proliferation and inhibiting apoptosis. The fusion gene transcript is detectable in approximately 95% of chronic myeloid leukemia (CML) patients and in some cases of acute lymphoblastic leukemia (ALL). Also, serial monitoring of patients for identifying and measuring BCR-ABL transcripts provides a more precise assessment of response to specific therapies and prediction of those in higher risk of disease progression.

BCR-ABL (p190) RQ Kit provides a ready-to-use Real-Time PCR assay for the detection and quantitation of BCR-ABL transcripts (p190, e1a2 break point only) as well as calculation of BCR-ABL%.

### Advantages of mbcr RQ Kit

#### Ready to Use

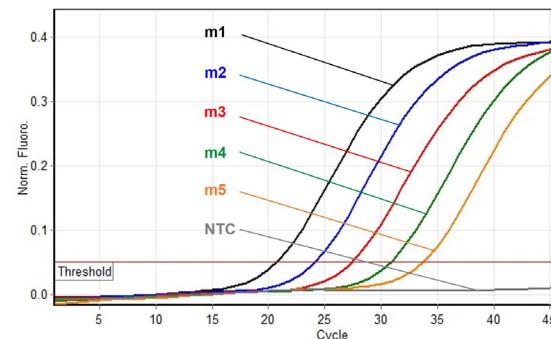
The mbcr and ABL Mixes contain all necessary reagents for Real-Time PCR and are ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample cDNA. Results can be viewed in Green/FAM channel for BCR-ABL and Yellow/VIC channel for ABL.

#### Control Gene

Kit also provides PCR Mix and Standards for assessment of ABL expression as the control gene. This would evaluate quality of the patient sample, RNA extraction and cDNA synthesis, preventing related false negative results.

#### Kit contents

mbcr RQ Mix	PCR Master Mix for the detection of BCR-ABL p190 transcripts (e1a2 break points only)	480µl
ABL Mix	PCR Master Mix for the detection of ABL transcripts	480µl
mbcr Standards	5 quantitation Standards (100,000 to 10 copies/µl)	150µl
ABL Standards	4 quantitation Standards (100,000 to 100 copies/µl)	150µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical mbcr graph in Green channel for RotorGene

#### Kit Specifications

Analytical Sensitivity	10 copies/µl or 0.2% in the context of 5,000 copies/µl of ABL transcripts
Reaction Type	Quantitative Real-Time PCR
Detection Method	TaqMan probe, Singleplex (FAM, VIC)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# BCR-ABL (p210) RQ Kit

## Detection and Quantitation of BCR-ABL p210 Transcripts

The Philadelphia chromosome is an abnormality resulting from the t(9;22) translocation. Consequently, the ABL proto-oncogene on chromosome 9 fuses with the BCR gene on chromosome 22. This fusion produces the BCR-ABL protein, primarily 210 kDa (b2a2 or b3a2) or 190 kDa (e1a2), which has constitutively active tyrosine kinase activity, promoting cell proliferation and inhibiting apoptosis. The fusion gene transcript is detectable in approximately 95% of chronic myeloid leukemia (CML) patients and in some cases of acute lymphoblastic leukemia (ALL). Also, serial monitoring of patients for identifying and measuring BCR-ABL transcripts provides a more precise assessment of response to specific therapies and prediction of those in higher risk of disease progression.

BCR-ABL (p210) RQ Kit provides a ready-to-use Real-Time PCR assay for the detection and quantitation of BCR-ABL transcripts (p210, b2a2 or b3a2 break points only) as well as calculation of BCR-ABL%.

### Advantages of MBCR RQ Kit

#### Ready to Use

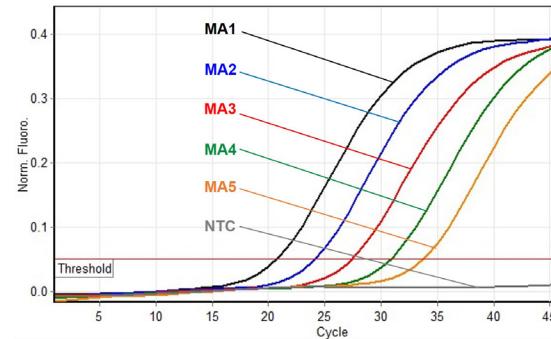
The MBCR and ABL Mixes contain all necessary reagents for Real-Time PCR and are ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample cDNA. Results can be viewed in Green/FAM channel for BCR-ABL and Yellow/VIC channel for ABL.

#### Internal Control

Kit also provides PCR Mix and Standards for assessment of ABL expression as the control gene. This would evaluate quality of the patient sample, RNA extraction and cDNA synthesis, preventing related false negative results.

#### Kit contents

MBCR RQ Mix	PCR Master Mix for the detection of BCR-ABL p210 transcripts ( b2a2 or b3a2 break points only)	480µl
ABL Mix	PCR Master Mix for the detection of ABL transcripts	480µl
MBCR Standards	5 quantitation Standards (100,000 to 10 copies/µl) for MBCR and ABL	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical MBCR graph in Green channel for RotorGene

#### Kit Specifications

Analytical Sensitivity	4 copies/µl or 0.08% for BCR-ABL in the context of 5,000 copies/µl of ABL transcripts
Reaction Type	Quantitative Real-Time PCR
Detection Method	TaqMan probe, Singleplex (FAM, VIC)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# BRAF RQ Kit

## Detection of BRAF Mutations

BRAF oncogene is among the most frequently mutated kinases in human cancer. Mutations in codon V600 have been reported in different types of cancers including 40%-50% of melanomas, 10%-70% of thyroid carcinomas, 10% of colorectal cancers and 3%-5% of Non-Small Cell Lung Cancers (NSCLC). Most BRAF mutations are located in codon 600, including V600E, V600Ec, V600D, V600K and V600R.

BRAF RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of these 5 mutations.

## Advantages of BRAF RQ Kit

### Ready to Use

The BRAF Mixes contain all necessary reagents for Real-Time PCR and are ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM and Yellow/VIC channels.



### Kit contents

BRAF Control Mix	PCR Master Mix for quality control	2x480µl
V600E Mix	PCR Master Mix for V600E mutation	480µl
V600Ec Mix	PCR Master Mix for V600Ec mutation	480µl
V600D Mix	PCR Master Mix for V600D mutation	480µl
V600K Mix	PCR Master Mix for V600K mutation	480µl
V600R Mix	PCR Master Mix for V600R mutation	480µl
BRAF Positive Control	Positive Control	250µl
BRAF Negative Control	Negative Control	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

### Kit Specifications

Analytical Sensitivity	0.5%-2%, depending on the mutation type
Reaction Type	Qualitative Real-Time PCR
Detection Method	TaqMan probe, Singleplex/ Duplex (FAM, VIC)

### Packaging

Kit is available as 24 and 48 reactions of 25µl.

# — EGFR RQ Kit

## Detection of EGFR Mutations

Epidermal Growth Factor Receptor (EGFR) is a tyrosine kinase receptor and is considered an oncogene. EGFR is involved in regulation of cellular proliferation, differentiation and survival. Mutations in EGFR exons 18, 19, 20 and 21 are associated with the development of different human cancers, specially Non-Small Cell Lung Cancer (NSCLC) and glioblastoma. Since, the choice of anti-EGFR therapies are highly dependent on the EGFR mutations, it is essential to test patients for these mutations.

This kit provides ready-to-use reagents for the detection of 34 mutations. Detected mutations include three point mutations in exon 18 (G719A, G719S and G719C) without differentiation, 24 deletions in exon 19 without differentiation, three insertion without differentiation and two point mutations (S768I, T790M) in exon 20 as well as two point mutations (L858R, L861Q) in exon 21.

EGFR RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of these 34 mutations.

## Advantages of EGFR RQ Kit

### Ready to Use

The EGFR Mixes contain all necessary reagents for Real-Time PCR and are ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM and Yellow/VIC channels.

### Kit contents

EGFR Ctrl Mix	PCR Master Mix for quality control	2×480µl
G719X Mix	PCR Master Mix for G719A/ G719S/G719C mutations	480µl
19Del Mix	PCR Master Mix for exon 19 deletions	480µl
20Ins Mix	PCR Master Mix for exon 20 insertions	480µl
S768I Mix	PCR Master Mix for S768I mutation	480µl
T790M Mix	PCR Master Mix for T790M mutation	480µl
L858R Mix	PCR Master Mix for L858R mutation	480µl
L861Q Mix	PCR Master Mix for L861Q mutation	480µl
EGFR Positive Control	Positive Control	250µl
EGFR Negative Control	Negative Control	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



### Kit Specifications

Analytical Sensitivity	1%-8%, depending on the mutation type
Reaction Type	Qualitative Real-Time PCR
Detection Method	TaqMan probe, Singleplex/Duplex (FAM, VIC)

### Packaging

Kit is available as 24 and 48 reactions of 25µl.

# — ETV6-RUNX1 RQ Kit

## Detection and Quantitation of ETV6-RUNX1 (TEL-AML1) Transcripts

ETV6-RUNX1 (TEL-AML1) is a genetic abnormality resulting from the t(12;21) translocation. RUNX1 gene encodes a protein involved in transcriptional control of hematopoiesis. However, this translocation leads to the formation of the ETV6-RUNX1 fusion protein, which represses the normal function of RUNX1.

This alteration occurs in approximately 25% of childhood acute lymphoblastic leukemia (ALL) diagnosed between the ages of 2-10 years.

ETV6-RUNX1 (TEL-AML1) RQ Kit provides a ready-to-use Real-Time PCR assay for the detection and quantitation of ETV6-RUNX1 transcripts as well as calculation of ETV6-RUNX1 percentage.

### Advantages of ETV6-RUNX1 RQ Kit

#### Ready to Use

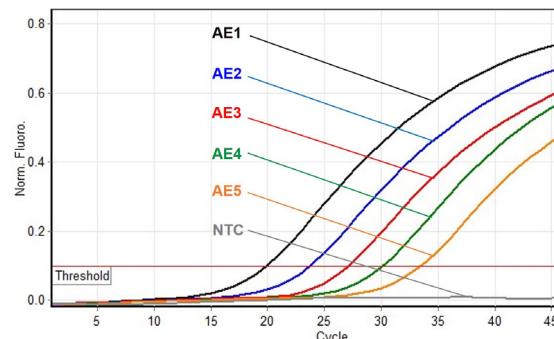
The ETV6-RUNX1 and ABL Mixes contain all necessary reagents for Real-Time PCR and are ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample cDNA. Results can be viewed in Green/FAM channel for ETV6-RUNX1 and Yellow/VIC channel for ABL.

#### Control Gene

Kit also provides PCR Mix and Standards for assessment of ABL expression as the control gene. This would evaluate quality of the patient sample, RNA extraction and cDNA synthesis, preventing related false negative results.

#### Kit contents

ETV6-RUNX1 Mix	PCR Master Mix for the detection of ETV6-RUNX1 transcripts	480 $\mu$ l
ABL Mix	PCR Master Mix for the detection of ABL transcripts	480 $\mu$ l
ETV6-RUNX1 Standards	5 quantitation Standards (100,000 to 10 copies/ $\mu$ l)	150 $\mu$ l
ABL Standards	4 quantitation Standards (100,000 to 100 copies/ $\mu$ l)	150 $\mu$ l
Water	PCR grade Water	200 $\mu$ l
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical ETV6-RUNX1 graph in Green channel for Rotor-Gene

#### Kit Specifications

Analytical Sensitivity	2 copies/ $\mu$ l or 0.02% for TEL-AML1 in context of 10,000 copies/ $\mu$ l of ABL transcripts
Reaction Type	Quantitative Real-Time PCR
Detection Method	TaqMan probe, Singleplex (FAM, VIC)

#### Packaging

Kit is available as 24 and 48 reactions of 25 $\mu$ l.

# JAK2 MQ Kit

## Detection and Quantitation of JAK2 (V617F) Mutation

JAK2 (Janus Kinase 2) is a Tyrosine Kinase located in the cytoplasm, playing an essential role in signaling pathways activated by cytokines and growth factors. The acquired mutation G1849T lead to a substitution of valine with phenylalanine at position 617 (V617F). This substitution results in constitutively active JAK2 which leads to uncontrolled cell proliferation in the absence of growth factors. This mutation is found in the majority of BCR-ABL-negative myeloproliferative disorders and has become a main diagnostic test for polycythemia vera (PV), essential thrombocythemia (ET) and primary myelofibrosis (PMF).

JAK2 MQ Kit provides a ready-to-use Real-Time PCR assay for the detection and quantitation of JAK2 V617F mutation.

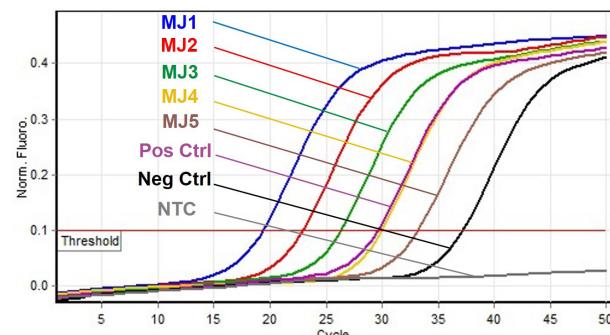
### Advantages of JAK2 MQ Kit

#### Ready to Use

The MJ and WJ Mixes contain all necessary reagents for Real-Time PCR and are ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM channel for MJ and WJ.

#### Kit contents

MJ Mix	PCR Master Mix for the detection of JAK2 (V617F) mutation	480 $\mu$ l
WJ Mix	PCR Master Mix for the detection of Wild type alleles	480 $\mu$ l
MJ Standards	5 quantitation Standards (100,000 to 10 copies/ $\mu$ l)	150 $\mu$ l
WJ Standards	5 quantitation Standards (100,000 to 10 copies/ $\mu$ l)	150 $\mu$ l
Positive Control 2.5%	Positive Control 2.5%	50 $\mu$ l
Negative Control	Negative Control	50 $\mu$ l
Water	PCR grade Water	200 $\mu$ l
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical MJ graph in Green channel for Rotor-Gene

#### Kit Specifications

Analytical Sensitivity	0.1% in context of 5000 copies/ $\mu$ l wild type alleles
Reaction Type	Quantitative Real-Time PCR
Detection Method	TaqMan probe, Singleplex (FAM)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25 $\mu$ l.

# JAK2 RQ Kit

## Detection of JAK2 (V617F) Mutation

JAK2 (Janus Kinase 2) is a Tyrosine Kinase located in the cytoplasm, playing an essential role in signaling pathways activated by cytokines and growth factors. The acquired mutation G1849T lead to a substitution of valine with phenylalanine at position 617 (V617F). This substitution results in constitutively active JAK2 which leads to uncontrolled cell proliferation in the absence of growth factors. This mutation is found in the majority of BCR-ABL-negative myeloproliferative disorders and has become a main diagnostic test for polycythemia vera (PV), essential thrombocythemia (ET) and primary myelofibrosis (PMF).

JAK2 RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of JAK2 V617F mutation.

### Advantages of JAK2 RQ Kit

#### Ready to Use

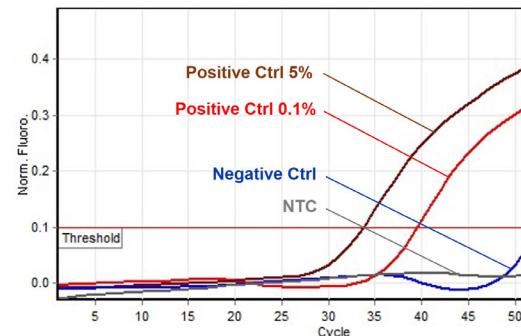
The JAK2 Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM channel.

#### Control Gene

The PCR Mix detects also a housekeeping gene in Yellow/VIC channel. Internal Control ensures quality of patient sample and DNA extraction and also prevents false negative results by PCR inhibition or setup errors.

#### Kit contents

JAK2 RQ Mix	PCR Master Mix for the detection of JAK2 (V617F) mutation	480 $\mu$ l
Positive Control 5%	Positive Control 5%	50 $\mu$ l
Positive Control 0.1%	Positive Control 0.1%	50 $\mu$ l
Negative Control	Negative Control	50 $\mu$ l
Water	PCR grade Water	200 $\mu$ l
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical graph of JAK2 Controls in Green channel for Rotor-Gene

#### Kit Specifications

Analytical Sensitivity	0.1% in 10-50 ng/ $\mu$ l DNA
Reaction Type	Qualitative Real-Time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25 $\mu$ l.

# KRAS RQ Kit

## Detection of KRAS Mutations

Colorectal cancer (CRC) is among the most prevalent cancers worldwide. Treatment with monoclonal antibodies against Epidermal Growth Factor Receptor (Anti-EGFR) has shown to be effective for CRC patients. However, the presence of certain KRAS mutations, particularly in codons 12 and 13, renders Anti-EGFR therapy ineffective. the same applies to the treatment of Non-Small Cell Lung Cancer (NSCLC) with Anti-EGFR therapies. Therefore, determining the KRAS mutation status is essential for these patients. Notably, 95% of KRAS mutations in CRC patients and 88% in NSCLC patients are reported in codons 12 and 13 including G12A, G12C, G12D, G12R, G12S, G12V and G13D.

KRAS RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of these 7 mutations.

## Advantages of KRAS RQ Kit

### Ready to Use

The KRAS Mixes contain all necessary reagents for Real-Time PCR and are ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM and Yellow/VIC channels.

### Kit contents

KRAS Control Mix	PCR Master Mix for quality control	2×480µl
G12A Mix	PCR Master Mix to check G12A mutation	480µl
G12C Mix	PCR Master Mix to check G12C mutation	480µl
G12D Mix	PCR Master Mix to check G12D mutation	480µl
G12R Mix	CR Master Mix to check G12R mutation	480µl
G12S Mix	PCR Master Mix to check G12S mutation	480µl
G12V Mix	PCR Master Mix to check G12V mutation	480µl
G13D Mix	PCR Master Mix to check G13D mutation	480µl
KRAS Positive Control	Positive Control	250µl
KRAS Negative Control	Negative Control	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



### Kit Specifications

Analytical Sensitivity	1%-4%, depending on the mutation
Reaction Type	Qualitative Real-Time PCR
Detection Method	TaqMan probe, Singleplex/Duplex (FAM, VIC)

### Packaging

Kit is available as 24 and 48 reactions of 25µl.

## Detection of NRAS Mutations

NRAS (neuroblastoma RAS viral oncogene homolog) is a gene that encodes a protein belonging to the RAS family of GTPases. These proteins play a critical role in cell signaling pathways regulating growth, differentiation and survival. Mutations in the NRAS gene are associated with various types of cancer, including melanoma, colorectal cancer and leukemia. The most common mutations occur at codons 12, 13, 61, 117 and 146, leading to dysregulated signaling and uncontrolled cellular proliferation.

NRAS RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of these 13 mutations.

## Advantages of NRAS RQ Kit

### Ready to Use

The NRAS Mixes contain all necessary reagents for Real-Time PCR and are ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be viewed in Green/FAM and Yellow/VIC channels.

### Kit contents

NRAS Control Mix	PCR Master Mix for quality control	2×480µl
G12 Mix	PCR Master Mix to check G12A, G12C, G12D, G12S, G12V mutations	480µl
G13 Mix	PCR Master Mix to check G13D, G13R, G13V mutations	480µl
A59 Mix	PCR Master Mix to check A59T, A59D mutations	480µl
Q61K Mix	PCR Master Mix to check Q61K mutation	480µl
Q61R Mix	PCR Master Mix to check Q61R mutation	480µl
Q61L Mix	PCR Master Mix to check Q61L mutation	480µl
Q61H Mix	PCR Master Mix to check Q61H mutation	480µl
K117 Mix	PCR Master Mix to check K117N, K117R mutations	480µl
A146T Mix	PCR Master Mix to check A146T mutation	480µl
NRAS Positive Control	Positive Control	250µl
NRAS Negative Control	Negative Control	250µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



### Kit Specifications

Analytical Sensitivity	1%-4%, depending on the mutation
Reaction Type	Qualitative Real-Time PCR
Detection Method	TaqMan probe, Singleplex/Duplex (FAM, VIC)

### Packaging

Kit is available as 24 and 48 reactions of 25µl.

# PML-RARA (bcr1) RQ Kit

## Detection and Quantitation of PML-RARA (bcr1) Transcripts

PML-RARA is an abnormality resulting from the t(15;17) (q22; q21) translocation. This translocation results in fusion of PML (promyelocytic) gene with RARA (retinoic acid receptor alpha) gene, and production of chimeric PML-RARA protein which is a transcription repressor and impairs the myeloid differentiation. While RARA breakpoints always occur in intron 2, PML breakpoints involves three different regions of intron 6 (55%), exon 6 (5%) and intron 3 (40%). The resulted isoforms of PML-RARA are respectively called bcr1/Long/L, bcr2/Variant/V and bcr3/Short/S.

PML-RARA accounts for more than 90% of acute progranulocytic leukemia (APL) cases and 10%-15% of acute myeloid leukemia (AML) cases.

PML-RARA (bcr1) RQ Kit provides a ready-to-use Real-Time PCR assay for the detection and quantitation of PML-RARA (bcr1) transcripts and for monitoring minimal residual disease (MRD).

### Advantages of PML-RARA (bcr1) RQ Kit

#### Ready to Use

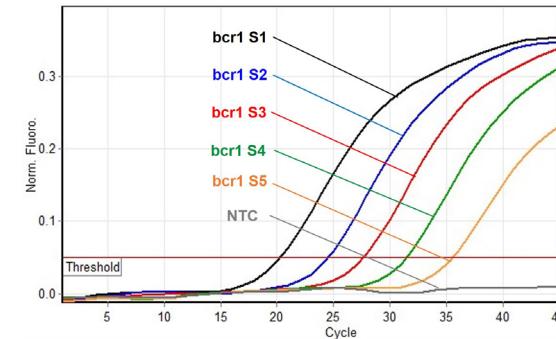
The bcr1 and ABL Mixes contain all necessary reagents for Real-Time PCR and are ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample cDNA. Results can be viewed in Green/FAM channel for bcr1 and Yellow/VIC channel for ABL.

#### Control Gene

Kit also provides PCR Mix and Standards for assessment of ABL expression as the control gene. This would evaluate quality of the patient sample, RNA extraction and cDNA synthesis, preventing related false negative results.

#### Kit contents

bcr1 RQ Mix	PCR Master Mix for the detection of bcr1 transcripts	480µl
ABL Mix	PCR Master Mix for the detection of ABL transcripts	480µl
bcr1 Standards	5 quantitation Standards (100,000 to 10 copies/µl)	150µl
ABL Standards	4 quantitation Standards (100,000 to 100 copies/µl)	150µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical PML-RARA, bcr1 graph in Green channel for Rotor-Gene

#### Kit Specifications

Analytical Sensitivity	2 copies/µl or 0.02% for bcr1 in the context of 10,000 copies/µl of ABL transcripts
Reaction Type	Quantitative Real-Time PCR
Detection Method	TaqMan probe, Singleplex (FAM, VIC)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# PML-RARA (bcr2) RQ Kit

## Detection and Quantitation of PML-RARA (bcr2) Transcripts

PML-RARA is an abnormality resulting from the t(15;17) (q22; q21) translocation. This translocation results in fusion of PML (promyelocytic) gene with RARA (retinoic acid receptor alpha) gene, and production of chimeric PML-RARA protein which is a transcription repressor and impairs the myeloid differentiation. While RARA breakpoints always occur in intron 2, PML breakpoints involves three different regions of intron 6 (55%), exon 6 (5%) and intron 3 (40%). The resulted isoforms of PML-RARA are respectively called bcr1/Long/L, bcr2/Variant/V and bcr3/Short/S.

PML-RARA accounts for more than 90% of acute progranulocytic leukemia (APL) cases and 10%-15% of acute myeloid leukemia (AML) cases.

PML-RARA (bcr2) RQ Kit provides a ready-to-use Real-Time PCR assay for the detection and quantitation of PML-RARA (bcr2) transcripts and for monitoring minimal residual disease (MRD).

### Advantages of PML-RARA (bcr2) RQ Kit

#### Ready to Use

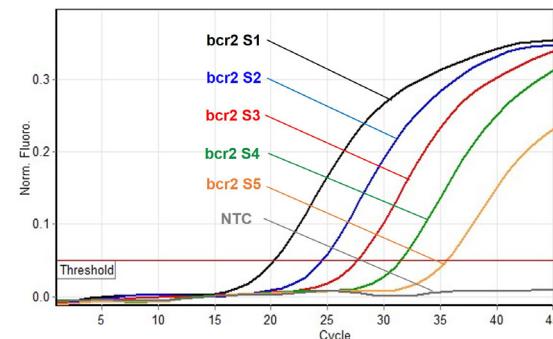
The bcr2 and ABL Mixes contain all necessary reagents for Real-Time PCR and are ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample cDNA. Results can be viewed in Green/FAM channel for bcr2 and Yellow/VIC channel for ABL.

#### Control Gene

Kit also provides PCR Mix and Standards for assessment of ABL expression as the control gene. This would evaluate quality of the patient sample, RNA extraction and cDNA synthesis, preventing related false negative results.

#### Kit contents

bcr2 RQ Mix	PCR Master Mix for the detection of bcr2 transcripts	480µl
ABL Mix	PCR Master Mix for the detection of ABL transcripts	480µl
bcr2 Standards	5 quantitation Standards (100,000 to 10 copies/µl)	150µl
ABL Standards	4 quantitation Standards (100,000 to 100 copies/µl)	150µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical PML-RARA, bcr2 graph in Green channel for Rotor-Gene

#### Kit Specifications

Analytical Sensitivity	2 copies/µl or 0.02% for bcr2 in the context of 10,000 copies/µl of ABL transcripts
Reaction Type	Quantitative Real-Time PCR
Detection Method	TaqMan probe, Singleplex (FAM, VIC)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# PML-RARA (bcr3) RQ Kit

## Detection and Quantitation of PML-RARA (bcr3) Transcripts

PML-RARA is an abnormality resulting from the t(15;17) (q22; q21) translocation. This translocation results in fusion of PML (promyelocytic) gene with RARA (retinoic acid receptor alpha) gene, and production of chimeric PML-RARA protein which is a transcription repressor and impairs the myeloid differentiation. While RARA breakpoints always occur in intron 2, PML breakpoints involves three different regions of intron 6 (55%), exon 6 (5%) and intron 3 (40%). The resulted isoforms of PML-RARA are respectively called bcr1/Long/L, bcr2/Variant/V and bcr3/Short/S.

PML-RARA accounts for more than 90% of acute progranulocytic leukemia (APL) cases and 10%-15% of acute myeloid leukemia (AML) cases.

PML-RARA (bcr3) RQ Kit provides a ready-to-use Real-Time PCR assay for the detection and quantitation of PML-RARA (bcr3) transcripts and for monitoring minimal residual disease (MRD).

### Advantages of PML-RARA (bcr3) RQ Kit

#### Ready to Use

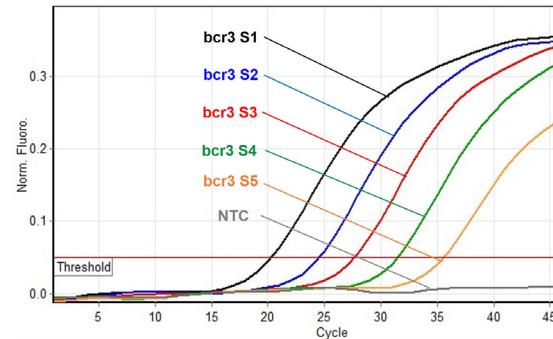
The bcr3 and ABL Mixes contain all necessary reagents for Real-Time PCR and are ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample cDNA. Results can be viewed in Green/FAM channel for bcr3 and Yellow/VIC channel for ABL.

#### Control Gene

Kit also provides PCR Mix and Standards for assessment of ABL expression as the control gene. This would evaluate quality of the patient sample, RNA extraction and cDNA synthesis, preventing related false negative results.

#### Kit contents

bcr3 RQ Mix	PCR Master Mix for the detection of bcr3 transcripts	480µl
ABL Mix	PCR Master Mix for the detection of ABL transcripts	480µl
bcr3 Standards	5 quantitation Standards (100,000 to 10 copies/µl)	150µl
ABL Standards	4 quantitation Standards (100,000 to 100 copies/µl)	150µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical PML-RARA, bcr3 graph in Green channel for Rotor-Gene

#### Kit Specifications

Analytical Sensitivity	2 copies/µl or 0.02% for bcr3 in the context of 10,000 copies/µl of ABL transcripts
Reaction Type	Quantitative Real-Time PCR
Detection Method	TaqMan probe, Singleplex (FAM, VIC)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# PML-RARA 3X RQ Kit

## Detection and Differentiation of PML-RARA (bcr1, bcr2, bcr3) Transcripts

PML-RARA is an abnormality resulted from t(15;17) (q22; q21) translocation. This translocation results in fusion of PML (promyelocytic) gene with RARA (retinoic acid receptor alpha) gene, and production of chimeric PML-RARA protein which is a transcription repressor and impairs the myeloid differentiation. While RARA breakpoints always occur in intron 2, PML breakpoints involve three different regions of intron 6 (55%), exon 6 (5%) and intron 3 (40%). These isoforms of PML-RARA are respectively called bcr1/Long/L, bcr2/Variant/V and bcr3/Short/S.

PML-RARA accounts for more than 90% of APL (acute progranulocytic leukemia) cases and 10-15% of AML (acute myeloid leukemia) cases.

PML-RARA 3X RQ Kit provides a ready-to-use Real-Time PCR assay for detection and differentiation of bcr1, bcr2 and bcr3.

## Advantages of PML-RARA 3X RQ Kit

### Ready to Use

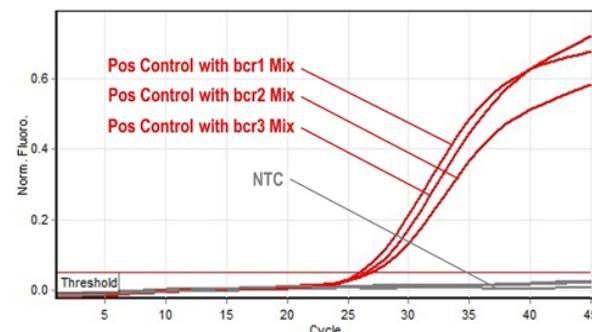
The bcr Mixes contains all necessary reagents for Real-Time PCR and are ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample cDNA. Results can be viewed in Green/FAM, Yellow/VIC channels.

### Internal Control

Kit also provides PCR Mix for assessment of ABL expression as the control gene. This would evaluate quality of the patient sample, RNA extraction and cDNA synthesis, preventing related false negative results.

### Kit contents

bcr1 Mix	PCR Master Mix for the detection of bcr1	480 $\mu$ l
bcr2 Mix	PCR Master Mix for detection of bcr2	480 $\mu$ l
bcr3 Mix	PCR Master Mix for detection of bcr3	480 $\mu$ l
ABL Mix	PCR Master Mix for detection of ABL	480 $\mu$ l
PML/ABL Pos Control	bcr1,2,3 Pos Ctrl: 1,000 copies/ $\mu$ l ABL Pos Ctrl: 10,000 copies/ $\mu$ l	150 $\mu$ l
Water	PCR grade Water	200 $\mu$ l
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical Controls graph with bcr Mixes in Green channel for Rotor-Gene

### Kit Specifications

Analytical Sensitivity	2 copies/ $\mu$ l for the cloned target
Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25 $\mu$ l.

# WT1 RQ Kit

## Detection and Quantitation of Wilms' Tumor1 (WT1) Gene Transcripts

Minimal Residual Disease (MRD) is an important factor in risk stratification and treatment planning for patients with acute myeloid leukemia (AML). MRD can be evaluated using different parameters including AML-related gene expression. According to the current LeukemiaNet guidelines, when no other parameters are available, Wilms' Tumor 1 (WT1) gene expression can be used as a marker for MRD evaluation (A Hochhaus, 2020, Leukemia, 34:966).

WT1 RQ Kit provides a ready-to-use Real-Time PCR assay for the detection and quantitation of WT1 and ABL transcripts.

### Advantages of WT1 RQ Kit

#### Ready to Use

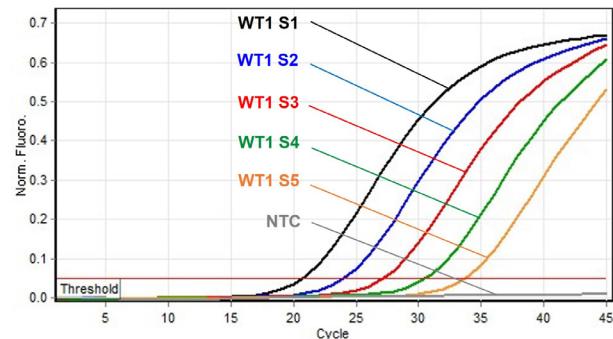
The WT1 and ABL Mixes contain all necessary reagents for Real-Time PCR and are ready to use; no further reagent or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample cDNA. Results can be viewed in Green/FAM channel for WT1 and Yellow/VIC channel for ABL.

#### Control Gene

Kit also provides PCR Mix and Standards for assessment of ABL expression as the control gene. This would evaluate quality of the patient sample, RNA extraction and cDNA synthesis, preventing related false negative results.

#### Kit contents

WT1 RQ Mix	PCR Master Mix for the detection of WT1 transcripts	480 $\mu$ l
ABL Mix	PCR Master Mix for the detection of ABL transcripts	480 $\mu$ l
WT1 Standards	5 quantitation Standards (100,000 to 10 copies/ $\mu$ l)	150 $\mu$ l
ABL Standards	4 quantitation Standards (100,000 to 100 copies/ $\mu$ l)	150 $\mu$ l
Water	PCR grade Water	200 $\mu$ l
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



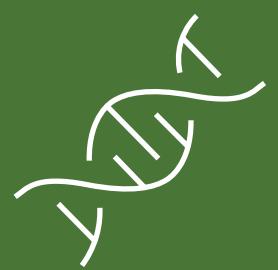
Typical WT1 graph in Green channel for RotorGene

#### Kit Specifications

Analytical Sensitivity	2 copies/ $\mu$ l or 0.04% for WT1 in the context of 10,000 copies/ $\mu$ l of ABL transcripts
Reaction Type	Quantitative Real-Time PCR
Detection Method	TaqMan probe, Singleplex (FAM, VIC)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25 $\mu$ l.



# Genetics

# Factor II RQ Kit

## Detection of Factor II (G20210A) Mutation

Prothrombin, or factor II, is a precursor to thrombin in the coagulation cascade. The G20210A mutation in prothrombin gene is the second most prevalent genetic risk factor for venous thromboembolism (VTE), following Factor V Leiden. This mutation increases the risk of venous thrombosis about 2-7 fold. It has also been linked to increased risk of pregnancy loss. The prevalence of this mutation ranges between 0.5% to 5%, depending on race and ethnicity.

The diagnosis of factor II (G20210A) mutation requires DNA analysis of F2, the gene encoding factor II.

Factor II RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of the Factor II (G20210A) mutation.

## Advantages of Factor II RQ Kit

### Ready to Use

The F2 Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be simply viewed in scatter graph analysis or other methods.

### Internal Control

The PCR Mix also examines quality of patient sample and DNA extraction and prevent false negative results by PCR inhibition or setup errors.

### Kit contents

Factor II RQ Mix	PCR Master Mix for the detection of Factor II (G20210A) mutation	480µl
MM Control	Homozygous Positive Control	100µl
WM Control	Heterozygous Positive Control	100µl
WW Control	Negative Control	100µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical Scatter graph for F2 Controls in Rotor-Gene

### Kit Specifications

Differentiation	WW, WM and MM Genotypes
Reaction Type	Real-Time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# Factor V RQ Kit

## Detection of Factor V Leiden (G1691A) Mutation

Factor V Leiden is an inherited blood-clotting disorder caused by a specific G1691A substitution in the F5 gene (R506Q). This condition was first identified in 1994.

Between 3% to 8% of the Caucasian population carries one copy of this mutation (heterozygous), while about 1 in 5000 individuals carries two copies (homozygous). Heterozygosity for Factor V Leiden is associated with 4-8 fold increased risk of venous thromboembolism (VTE) including deep venous thrombosis (DVT) and pulmonary embolism (PE). Factor V Leiden is also associated with a 2-3 fold increase in relative risk of pregnancy loss and may contribute to other pregnancy complications such as preeclampsia, fetal growth retardation and placental abruption.

The diagnosis of Factor V Leiden requires the activated protein C (APC) resistance assay as a coagulation screening test or sequence analysis of the F5 gene.

Factor V RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of the Factor V Leiden (G1691A).

## Advantages of Factor V RQ Kit

### Ready to Use

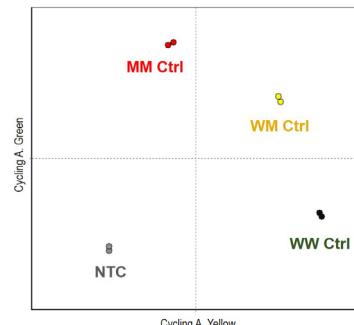
The F5 Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be simply viewed in scatter graph analysis or other methods.

### Internal Control

The PCR Mix also examines quality of patient sample and DNA extraction and prevent false negative results by PCR inhibition or setup errors.

### Kit contents

Factor V RQ Mix	PCR Master Mix for the detection of Factor V Leiden (G1691A)	480µl
MM Control	Homozygous Positive Control	100µl
WM Control	Heterozygous Positive Control	100µl
WW Control	Negative Control	100µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical Scatter graph for F5 Controls in Rotor-Gene

### Kit Specifications

Differentiation	WW, WM and MM Genotypes
Reaction Type	Real-Time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# Factor XIII RQ Kit

## Detection of Factor XIII (Val34Leu) Polymorphism

Factor XIII, first called fibrin stabilizing factor, was discovered in 1948. It is involved in the last stage of coagulation by stabilizing blood clots. It also participates in wound repair, tissue healing, maintaining pregnancy and promoting angiogenesis. Among the known polymorphisms of factor XIII, the Val34Leu has been studied more extensively as it increases the activity of factor XIII and alters the structure of fibrin clots. Studies have shown that this polymorphism may reduce the risk of myocardial infarction, brain infarction and venous thromboembolism (VTE). However, it also increases the risk of intracerebral hemorrhage and pulmonary embolism.

Factor XIII RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of the Factor XIII (Val34Leu) polymorphism.

## Advantages of Factor XIII RQ Kit

### Ready to Use

The F13 Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be simply viewed in scatter graph analysis or other methods.

### Internal Control

The PCR Mix also examines quality of patient sample and DNA extraction and prevent false negative results by PCR inhibition or setup errors.

### Kit contents

Factor XIII RQ Mix	PCR Master Mix for the detection of Factor XIII (Val34Leu) Polymorphism	500µl
MM Control	Homozygous Positive Control	100µl
WM Control	Heterozygous Positive Control	100µl
WW Control	Negative Control	100µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical Scatter graph for F13 Controls in Rotor-Gene

### Kit Specifications

Differentiation	WW, WM and MM Genotypes
Reaction Type	Real-Time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# Hemochromatosis RQ Kit

## Detection of H63D and C282Y Mutations

Hereditary Hemochromatosis is a genetic disorder caused by excessive iron accumulation in body tissues, leading to potential organ damage. Mutations in the HFE gene, mostly H63D, C282Y and S65C, are strongly associated with this condition. Clinical manifestations of hereditary hemochromatosis can vary widely and may affect the liver, heart, endocrine glands and skin.

Hemochromatosis RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of H63D and C282Y mutations.

## Advantages of Hemochromatosis RQ Kit

### Ready to Use

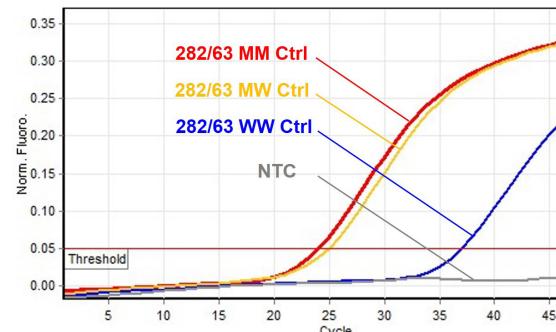
The Hemochromatosis Mixes contain all necessary reagents for Real-Time PCR and are ready to use; no further reagent preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be simply viewed in Green/FAM for H63D mutation and Yellow/VIC channels for C282Y mutation.

### Internal Control

The PCR Mixes also examine quality of patient sample and DNA extraction and prevent false negative results by PCR inhibition or setup errors.

### Kit contents

282/63 M RQ Mix	PCR Master Mix for the detection of C282Y and H63D mutation	480µl
282/63 W RQ Mix	PCR Master Mix for the detection of Wild type alleles	480µl
282/63 MM Control	Homozygous Positive Control	50µl
282/63 WM Control	Heterozygous Positive Control	50µl
282/63 WW Control	Negative Control	50µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical Hemochromatosis graph in Green channel for Rotor-Gene

### Kit Specifications

Differentiation	WW, WM and MM Genotypes
Reaction Type	Real-Time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# — HLA-B18 RQ Kit

## Detection of HLA-B18

Human leukocyte antigen (HLA-B18) is a class I surface antigen encoded by the B locus within the major histocompatibility complex (MHC) on chromosome 6. Liver fibrosis progression is much faster in HLA-B18 positive patients than HLA-B18 negative patients. In addition, the risk of subacute thyroiditis is increased in the co-presence of HLA-B18 and HLA-B35. As a result, the detection of HLA-B18 is valuable in the above cases.

HLA-B18 RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of HLA-B18.

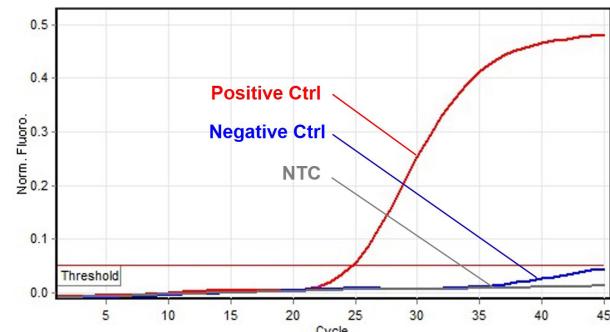
## Advantages of HLA-B18 RQ Kit

### Ready to Use

The HLA-B18 Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be simply viewed in Green/FAM and Yellow/VIC channels.

### Internal Control

To examine DNA extraction quality, detect PCR inhibitors and prevent false-negative results, primers and probe for an Internal Control (a housekeeping gene) are included in the PCR Master Mix. This ensure accurate result by identifying errors related to extraction or inhibition.



Typical HLA-B18 graph in Green channel for Rotor-Gene

### Kit contents

HLA-B18 RQ Mix	PCR Master Mix for the detection of HLA-B18 and Internal Control	480 $\mu$ l
Positive Control	Positive Control	50 $\mu$ l
Negative Control	Negative Control	50 $\mu$ l
Water	PCR grade Water	200 $\mu$ l
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

### Kit Specifications

Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25 $\mu$ l.

# — HLA-B27 RQ Kit

## Detection of HLA-B27

Human leukocyte antigen (HLA-B27) is a class I surface antigen encoded by the B locus within the major histocompatibility complex (MHC) on chromosome 6. HLA-B27 has been associated with ankylosing spondylitis and other inflammatory diseases such as reactive arthritis, uveitis and psoriasis. Studies show 90% of patients with ankylosing spondylitis have HLA-B27 compared with 5%-10% of healthy controls. Consequently, testing for HLA-B27 is a valuable tool in the diagnosis and management of these conditions, aiding in early detection and targeted treatment strategies.

HLA-B27 RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of HLA-B27.

## Advantages of HLA-B27 RQ Kit

### Ready to Use

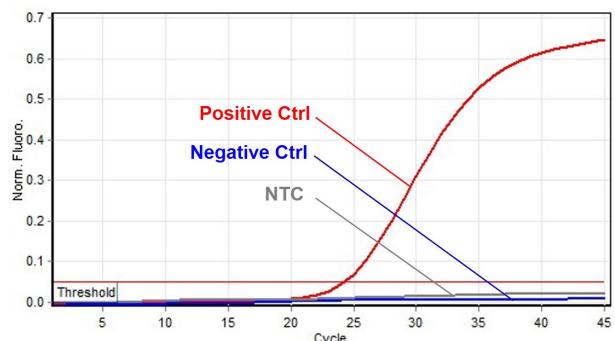
The HLA-B27 Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be simply viewed in Green/FAM and Yellow/VIC channels.

### Internal Control

To examine DNA extraction quality, detect PCR inhibitors and prevent false-negative results, primers and probe for an Internal Control (a housekeeping gene) are included in the PCR Master Mix. This ensure accurate result by identifying errors related to extraction or inhibition.

### Kit contents

HLA-B27 RQ Mix	PCR Master Mix for the detection of HLA-B27 and Internal Control	480 $\mu$ l
Positive Control	Positive Control	50 $\mu$ l
Negative Control	Negative Control	50 $\mu$ l
Water	PCR grade Water	200 $\mu$ l
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical HLA-B27 graph in Green channel for Rotor-Gene

### Kit Specifications

Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25 $\mu$ l.

# — HLA-B51 RQ Kit

## Detection of HLA-B51

Human leukocyte antigen (HLA-B51) is a class I surface antigen encoded by the B locus within the major histocompatibility complex (MHC) on chromosome 6. HLA-B51 has been associated with Behcet's disease (BD). Studies show 50%-80% of patients with BD have HLA-B51. As a result, tests for HLA-B5 are valuable in the diagnosis and control of this disease.

HLA-B51 RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of HLA-B51.

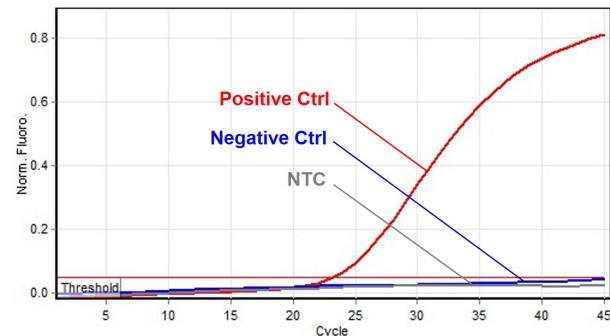
## Advantages of HLA-B51 RQ Kit

### Ready to Use

The HLA-B51 Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be simply viewed in Green/FAM and Yellow/VIC channels.

### Internal Control

To examine DNA extraction quality, detect PCR inhibitors and prevent false-negative results, primers and probe for an Internal Control (a housekeeping gene) are included in the PCR Master Mix. This ensure accurate result by identifying errors related to extraction or inhibition.



Typical HLA-B51 graph in Green channel for Rotor-Gene

### Kit contents

HLA-B51 RQ Mix	PCR Master Mix for the detection of HLA-B51 and Internal Control	480 $\mu$ l
Positive Control	Positive Control	50 $\mu$ l
Negative Control	Negative Control	50 $\mu$ l
Water	PCR grade Water	200 $\mu$ l
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

### Kit Specifications

Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25 $\mu$ l.

# — HLA-B52 RQ Kit

## Detection of HLA-B52

Human leukocyte antigen (HLA-B52) is a class I surface antigen encoded by the B locus within the major histocompatibility complex (MHC) on chromosome 6. HLA-B52 has been associated with Takayasu arteritis (TA). Based on epidemiologic studies, TA is more common in Asian populations. Some studies show higher prevalence of HLA-B52 in TA patients compared to normal population (20%-28% vs 6%-10%). The prevalence of ulcerative colitis (UC) is reported in patients with TA and HLA-B52 is an important factor in co-occurrence of UC and TA. As a result, tests for HLA-B52 are valuable in the diagnosis and control of these diseases.

HLA-B52 RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of HLA-B52.

## Advantages of HLA-B52 RQ Kit

### Ready to Use

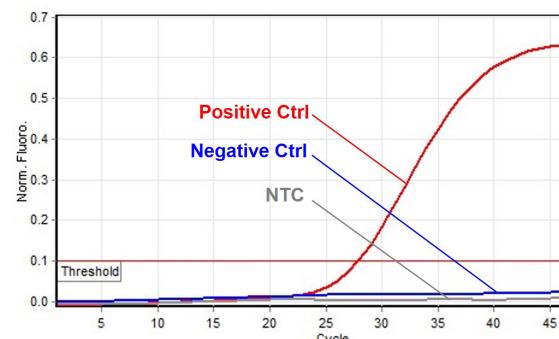
The HLA-B52 Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be simply viewed in Green/FAM and Yellow/VIC channels.

### Internal Control

To examine DNA extraction quality, detect PCR inhibitors and prevent false-negative results, primers and probe for an Internal Control (a housekeeping gene) are included in the PCR Master Mix. This ensure accurate result by identifying errors related to extraction or inhibition.

### Kit contents

HLA-B52 RQ Mix	PCR Master Mix of HLA-B52 and Internal Control	480µl
Positive Control	Positive Control	50µl
Negative Control	Negative Control	50µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical HLA-B52 graph in Green channel for Rotor-Gene

### Kit Specifications

Reaction Type	Qualitative Real-time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# MTHFR-1298 RQ Kit

## Detection of MTHFR (A1298C) Mutation

MTHFR stands for Methylene tetrahydrofolate reductase, a key regulatory enzyme in folate and homocysteine metabolism. Since the C677T and A1298C variants show reduced activity (30%-65% and 15%-30% respectively), these polymorphisms are among the most important genetic determinants influencing plasma total homocysteine levels. Due to their impact on homocysteine metabolism, they have been linked to several complex disorders including arterial thrombosis, atherosclerosis, coronary heart disease, neural tube defects, several types of cancer, adverse drug interactions and osteoporosis. However, the clinical relevance of these associations remains controversial. Depending on ethnic background, up to 50% of the population may carry at least one variant allele of MTHFR gene.

MTHFR-1298 RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of A1298C mutation.



## Advantages of MTHFR-1298 RQ Kit

### Ready to Use

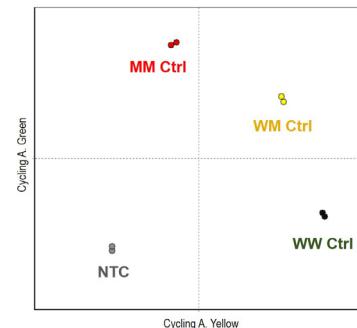
The MTHFR-1298 Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be simply viewed by scatter graph analysis or other methods.

### Internal Control

The PCR Mix also examines quality of patient sample and DNA extraction and prevent false negative results by PCR inhibition or setup errors.

### Kit contents

MTHFR-1298 RQ Mix	PCR Master Mix for the detection of A1298C mutation	480µl
MM Control	Homozygous Positive Control	100µl
WM Control	Heterozygous Positive Control	100µl
WW Control	Negative Control	100µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical Scatter graph for MTHFR A1298C Controls in Rotor-Gene

### Kit Specifications

Differentiation	WW, WM and MM Genotypes
Reaction Type	Real-Time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# MTHFR-677 RQ Kit

## Detection of MTHFR (C677T) Mutation

MTHFR stands for Methylene tetrahydrofolate reductase, a key regulatory enzyme in folate and homocysteine metabolism. Since the C677T and A1298C variants show reduced activity (30%-65% and 15%-30% respectively), these polymorphisms are among the most important genetic determinants influencing plasma total homocysteine levels. Due to their impact on homocysteine metabolism, they have been linked to several complex disorders including arterial thrombosis, atherosclerosis, coronary heart disease, neural tube defects, several types of cancer, adverse drug interactions and osteoporosis. However, the clinical relevance of these associations remains controversial. Depending on ethnic background, up to 50% of the population may carry at least one variant allele of MTHFR gene.

MTHFR-677 RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of C677T mutation.



## Advantages of MTHFR-677 RQ Kit

### Ready to Use

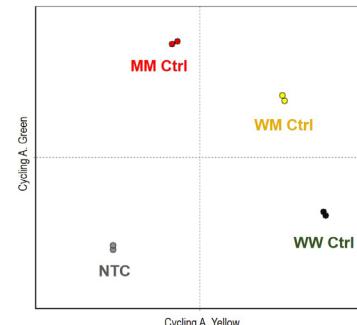
The MTHFR-677 Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be simply viewed by scatter graph analysis or other methods.

### Internal Control

The PCR Mix also examines quality of patient sample and DNA extraction and prevent false negative results by PCR inhibition or setup errors.

### Kit contents

MTHFR-677 RQ Mix	PCR Master Mix for the detection of C677T mutation	480µl
MM Control	Homozygous Positive Control	100µl
WM Control	Heterozygous Positive Control	100µl
WW Control	Negative Control	100µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1



Typical Scatter graph for MTHFR C677T Controls in Rotor-Gene

### Kit Specifications

Differentiation	WW, WM and MM Genotypes
Reaction Type	Real-Time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# PAI-1 RQ Kit

## Detection of PAI-1 4G/5G Polymorphism

Plasminogen activator inhibitor 1 (PAI-1) is a 52 kDa glycoprotein. It is the main inhibitor of plasminogen activators and, consequently, fibrinolysis and blood clot degradation. PAI-1 gene is located on chromosome 7 and consists of 9 exons. It includes many variations. The most significant variation, however, lies in the promoter region at position -675, which is a single guanine base insertion/deletion known as 4G/5G polymorphism. While the 5G allele binds both a transcription activator and a repressor, the 4G allele binds only the activator, leading to higher expression of PAI-1. The 4G allele is considered a predisposing factor and has been related to various clinically important conditions, including deep vein thrombosis, atherosclerosis, myocardial infarction, cancer, sepsis, miscarriage and asthma.

PAI-1 RQ Kit provides a ready-to-use Real-Time PCR assay for the detection of PAI-1 4G/5G polymorphism.



## Advantages of PAI-1 RQ Kit

### Ready to Use

The PAI-1 Mix contains all necessary reagents for Real-Time PCR and is ready to use; no further reagent preparation or mixing is required. Reactions are prepared simply by addition of the mix directly to the tubes followed by the sample DNA. Results can be simply viewed by scatter graph analysis or other methods.

### Internal Control

The PCR Mix also examines quality of patient sample and DNA extraction and prevent false negative results by PCR inhibition or setup errors.

### Kit contents

PAI-1 RQ Mix	PCR Master Mix for the detection of PAI-1 4G/5G polymorphism	480µl
4G/4G Control	4G/4G Homozygous Control	100µl
4G/5G Control	4G/5G Heterozygous Control	100µl
5G/5G Control	5G/5G Homozygous Control	100µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

### Kit Specifications

Differentiation	4G/4G, 4G/5G and 5G/5G Genotypes
Reaction Type	Real-Time PCR
Detection Method	TaqMan probe, Duplex (FAM, VIC)

### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.

# Thombo4X Kit

## Detection of Factor II (G20210A), Factor V Leiden (G1691A), MTHFR (C677T) and MTHFR (A1298C) Mutations

Thrombophilia (hypercoagulability) is an acquired or inherited disorder in which the risk of thrombosis increases due to abnormalities in blood coagulation. Several point mutations are known to play a role in thrombophilia.

Thombo4X Kit provides a ready-to-use Real-Time PCR assay for the detection of Factor II (G20210A), Factor V Leiden (G1691A), MTHFR (C677T) and MTHFR (A1298C) mutations in human DNA.

### Advantages of Thombo4X Kit

#### Ready to Use

This kit includes two mixes. The F2-F5 Mix detects Factor II (G20210A) and Factor V Leiden (G1691A) and the MTHFR Mix detects MTHFR A1298C and MTHFR C677T mutations. Both mixes contain all necessary reagents for Real-Time PCR and are ready to use; no further reagent preparation or mixing is required. Reactions are prepared just by addition of the mix directly to the tubes followed by the sample DNA. Results can be simply viewed in Green/FAM, Yellow/VIC, Orange/ROX and Red/Cy5 channels.

#### Internal Control

The PCR Mixes also examine quality of patient sample and DNA extraction and prevent false negative results by PCR inhibition or setup errors.



Typical Scatter graph for Controls with MTHFR Mix in Rotor-Gene

For MTHFR A1298C

#### Kit contents

F2-F5 Mix	PCR Master Mix for the detection of factor II and factor V	480µl
MTHFR Mix	PCR Master Mix for the detection of MTHFR A1298C and MTHFR C677T	480µl
Thrbm MM Control	Homozygous Positive Control	100µl
Thrbm WM Control	Heterozygous Positive Control	100µl
Thrbm WW Control	Negative Control	100µl
Water	PCR grade Water	200µl
CD & Manual	Instruction for use	1
Quick Guide	A short version of instruction for use	1

#### Kit Specifications

Differentiation	WW, WM and MM Genotypes
Reaction Type	Real-Time PCR
Detection Method	TaqMan Probe, Multiplex (Green/FAM, Yellow/VIC, Orange/Rox, Red/Cy5)

#### Packaging

Kit is available as 24, 48 and 96 reactions of 25µl.



## Products List

Real-Time PCR kits	24 rxn Cat No.	48 rxn Cat No.	96 rxn Cat No.	Page No.
Adenovirus Detection and Quantitation kit	AdenoRQ24	AdenoRQ48	AdenoRQ96	3
Aspergillus Detection Kit (RQ2)	Aspergillus2RQ24	Aspergillus2RQ48	Aspergillus2RQ96	4
Aspergillus Detection Kit (RQ4)	Aspergillus4RQ24	Aspergillus4RQ48	Aspergillus4RQ96	5
BK Virus Detection and Quantitation kit	BKRQ24	BKRQ48	BKRQ96	6
Brucella Virus Detection and Quantitation kit	BrucellaRQ24	BrucellaRQ48	BrucellaRQ96	7
Chlamydia Detection kit	ChlamydiaRQ24	ChlamydiaRQ48	ChlamydiaRQ96	8
CMV Detection and Quantitation kit	CMVRQ24	CMVRQ48	CMVRQ96	9
COVID-19 Detection kit	COVIDRQ24	COVIDRQ48	COVIDRQ96	10
COVID-Flu Detection kit	COVID-FluRQ24	COVID-FluRQ48	COVID-FluRQ96	11
Dengue Detection Kit	DenvRQ24	DenvRQ48	DenvRQ96	12
EBV Detection and Quantitation kit	EBVRQ24	EBVRQ48	EBVRQ96	13
Enterovirus Detection Kit	ENTVRQ24	ENTVRQ48	ENTVRQ96	14
Flu-RSV Detection kit	Flu-RSVRQ24	Flu-RSVRQ48	Flu-RSVRQ96	15
HBV Detection and Quantitation kit	HBVRQ24	HBVRQ48	HBVRQ96	16
HCV Detection and Quantitation kit	HCVRQ24	HCVRQ48	HCVRQ96	17
HCV Genotyping Kit (RG)	HCVGenRG24	HCVGenRG48	HCVGenRG96	18
Herpes (CMV,EBV,HSV-1,HSV-2,VZV) Detection Kit	HERPESRQ24	HERPESRQ48	HERPESRQ96	19
HHV6 Detection and Quantitation kit	HHV6RQ24	HHV6RQ48	HHV6RQ96	20
HIV-1 Detection and Quantitation kit	HIVRQ24	HIVRQ48	HIVRQ96	21
HPV HR Detection Kit (RQ3)	HPVHR3RQ24	HPVHR3RQ48	HPVHR3RQ96	22
HPV HR Detection Kit (RQ4)	HPVHR4RQ24	HPVHR4RQ48	HPVHR4RQ96	23
HSV 1 and 2 Detection and Quantitation kit	HSV RQ24	HSV RQ48	HSV RQ96	24
HSV 1 and 2 Detection and Typing kit	HSV Typ RQ24	HSV Typ RQ48	HSV Typ RQ96	25
HTLV I Detection and Quantitation kit	HTLVRQ24	HTLVRQ48	HTLVRQ96	26
JC Virus Detection and Quantitation kit	JCRQ24	JCRQ48	JCRQ96	27
JC-BK Detection and Quantitation Kit	BK-JCRQ24	BK-JCRQ48	BK-JCRQ96	28
Leishmania Detection Kit	LeishRQ24	LeishRQ48	LeishRQ96	29
Measles Detection Kit	MeaslesRQ24	MeaslesRQ48	MeaslesRQ96	30
Mpox Detection Kit	MPoxRQ24	MPoxRQ48	MPoxRQ96	31
Mumps Virus Detection Kit	MumpsRQ24	MumpsRQ48	MumpsRQ96	32
Mycoplasma Detection Kit	MycoplasmaRQ24	MycoplasmaRQ48	MycoplasmaRQ96	33
Nocardia Detection Kit	NocardiaRQ24	NocardiaRQ48	NocardiaRQ96	34
ParvoVirus B19 Detection and Quantitation kit	ParvoRQ24	ParvoRQ48	ParvoRQ96	35
Resp I Detection Kit	RespIRQ24	RespIRQ48	RespIRQ96	36
Resp II Detection Kit	RespIIRQ24	RespIIRQ48	RespIIRQ96	37

Real-Time PCR kits	24 rxn Cat No.	48 rxn Cat No.	96 rxn Cat No.	Page No.
RSV Detection Kit	RSVRQ24	RSVRQ48	RSVRQ96	38
STI-3 Detection Kit	STI3RQ24	STI3RQ48	STI3RQ96	39
STI-7 Detection Kit	STI7RQ24	STI7RQ48	STI7RQ96	40
TB Detection and Quantitation kit	TBRQ24	TBRQ48	TBRQ96	41
Toxo Detection Kit	ToxoRQ24	ToxoRQ48	ToxoRQ96	42
Trichomonas Detection Kit	TrichoRQ24	TrichoRQ48	TrichoRQ96	43
Ureaplasma Detection Kit	UreaRQ24	UreaRQ48	UreaRQ96	44
VZV Detection and Quantitation kit	VZVRQ24	VZVRQ48	VZVRQ96	45
<b>Oncogenetics</b>				
AML1-ETO Detection and Quantitation kit	AML1-ETORQ24	AML1-ETORQ48	AML1-ETORQ96	47
BCR-ABL (p190) Detection and Quantitation kit	MBCR190RQ24	MBCR190RQ48	MBCR190RQ96	48
BCR-ABL (p210) Detection and Quantitation kit	MBCR210RQ24	MBCR210RQ48	MBCR210RQ96	49
BRAF Mutation Detection Kit	BRAFRQ24	BRAFRQ48	.....	50
EGFR Mutation Detection Kit	EGFRRQ24	EGFRRQ48	.....	51
ETV6-RUNX1 Detection and Quantitation kit	ETV6-RUNX1RQ24	ETV6-RUNX1RQ48	ETV6-RUNX1RQ96	52
JAK2 Mutation Detection and Quantitation kit	JAK2MQ24	JAK2MQ48	JAK2MQ96	53
JAK2 Mutation Detection kit	JAK2RQ24	JAK2RQ48	JAK2RQ96	54
KRAS Mutation Detection Kit	KRASRQ24	KRASRQ48	.....	55
NRAS Detection Kit	NRASRQ24	NRASRQ48	.....	56
PML-RARA (bcr1) Detection and Quantitation kit	BCR1RQ24	BCR1RQ48	BCR1RQ96	57
PML-RARA (bcr2) Detection and Quantitation kit	BCR2RQ24	BCR2RQ48	BCR2RQ96	58
PML-RARA (bcr3) Detection and Quantitation kit	BCR3RQ24	BCR3RQ48	BCR3RQ96	59
PML-RARA 3X (bcr1,bcr2,bcr3) Detection kit	PML-RARA3XRQ24	PML-RARA3XRQ48	PML-RARA3XRQ96	60
WT1 Quantitation kit	WT1RQ24	WT1RQ48	WT1RQ96	61
<b>Genetics</b>				
Factor II (Prothrombin) Mutation Detection kit (RQ)	F2RQ24	F2RQ48	F2RQ96	63
Factor V Leiden Mutation Detection kit (RQ)	F5RQ24	F5RQ48	F5RQ96	64
Factor XIII (Val34Leu) Polymorphism Detection kit	F13RQ24	F13RQ48	F13RQ96	65
HLA-B18 Detection kit	HLA18RQ24	HLA18RQ48	HLA18RQ96	66
HLA-B27 Detection kit	HLA27RQ24	HLA27RQ48	HLA27RQ96	67
HLA-B51 Detection kit	HLA51RQ24	HLA51RQ48	HLA51RQ96	68
HLA-B52 Detection kit	HLA52RQ24	HLA52RQ48	HLA52RQ96	69
Hemochromatosis (H63D,C282Y) Mutation Detection kit	HMCHRQ24	HMCHRQ48	HMCHRQ96	70
MTHFR A1298C Mutation Detection kit	MTHFR1298RQ24	MTHFR1298RQ48	MTHFR1298RQ96	71
MTHFR C677T Mutation Detection kit (RQ)	MTHFR677RQ24	MTHFR677RQ48	MTHFR677RQ96	72
PAI-1 4G/5G Polymorphism Detection kit	PAIRQ24	PAIRQ48	PAIRQ96	73
Thrombo4X Mutation Detection kit	T4XRQ24	T4XRQ48	T4XRQ96	74

## Products List (Alphabetic sorted)

Real-Time PCR kits	24 rxn Cat No.	48 rxn Cat No.	96 rxn Cat No.	Page No.
Adenovirus Detection and Quantitation kit	AdenoRQ24	AdenoRQ48	AdenoRQ96	3
AML1-ETO Detection and Quantitation kit	AML1-ETORQ24	AML1-ETORQ48	AML1-ETORQ96	47
Aspergillus Detection Kit (RQ2)	Aspergillus2RQ24	Aspergillus2RQ48	Aspergillus2RQ96	4
Aspergillus Detection Kit (RQ4)	Aspergillus4RQ24	Aspergillus4RQ48	Aspergillus4RQ96	5
BCR-ABL (p190) Detection and Quantitation kit	MBCR190RQ24	MBCR190RQ48	MBCR190RQ96	48
BCR-ABL (p210) Detection and Quantitation kit	MBCR210RQ24	MBCR210RQ48	MBCR210RQ96	49
BRAF Mutation Detection Kit	BRAFRQ24	BRAFRQ48	.....	50
BK Virus Detection and Quantitation kit	BKRQ24	BKRQ48	BKRQ96	6
Brucella Virus Detection and Quantitation kit	BrucellaRQ24	BrucellaRQ48	BrucellaRQ96	7
Chlamydia Detection kit	ChlamydiaRQ24	ChlamydiaRQ48	ChlamydiaRQ96	8
CMV Detection and Quantitation kit	CMVRQ24	CMVRQ48	CMVRQ96	9
COVID-19 Detection kit	COVIDRQ24	COVIDRQ48	COVIDRQ96	10
COVID-Flu Detection kit	COVID-FluRQ24	COVID-FluRQ48	COVID-FluRQ96	11
Dengue Detection Kit	DenvRQ24	DenvRQ48	DenvRQ96	12
EBV Detection and Quantitation kit	EBVRQ24	EBVRQ48	EBVRQ96	13
EGFR Mutation Detection Kit	EGFRRQ24	EGFRRQ48	.....	51
Enterovirus Detection Kit	ENTVRQ24	ENTVRQ48	ENTVRQ96	14
ETV6-RUNX1 Detection and Quantitation kit	ETV6-RUNX1RQ24	ETV6-RUNX1RQ48	ETV6-RUNX1RQ96	52
Factor II (Prothrombin) Mutation Detection kit (RQ)	F2RQ24	F2RQ48	F2RQ96	63
Factor V Leiden Mutation Detection kit (RQ)	F5RQ24	F5RQ48	F5RQ96	64
Factor XIII (Val34Leu) Polymorphism Detection kit	F13RQ24	F13RQ48	F13RQ96	65
Flu-RSV Detection kit	Flu-RSVRQ24	Flu-RSVRQ48	Flu-RSVRQ96	15
HBV Detection and Quantitation kit	HBVRQ24	HBVRQ48	HBVRQ96	16
HCV Detection and Quantitation kit	HCVRQ24	HCVRQ48	HCVRQ96	17
HCV Genotyping Kit (RG)	HCVGenRG24	HCVGenRG48	HCVGenRG96	18
Hemochromatosis (H63D,C282Y) Mutation Detection kit	HMCHRQ24	HMCHRQ48	HMCHRQ96	70
Herpes (CMV,EBV,HSV-1,HSV-2,VZV) Detection Kit	HERPESRQ24	HERPESRQ48	HERPESRQ96	19
HHV6 Detection and Quantitation kit	HHV6RQ24	HHV6RQ48	HHV6RQ96	20
HIV-1 Detection and Quantitation kit	HIVRQ24	HIVRQ48	HIVRQ96	21
HLA-B18 Detection kit	HLA18RQ24	HLA18RQ48	HLA18RQ96	66
HLA-B27 Detection kit	HLA27RQ24	HLA27RQ48	HLA27RQ96	67
HLA-B51 Detection kit	HLA51RQ24	HLA51RQ48	HLA51RQ96	68
HLA-B52 Detection kit	HLA52RQ24	HLA52RQ48	HLA52RQ96	69
HPV HR Detection Kit (RQ3)	HPVHR3RQ24	HPVHR3RQ48	HPVHR3RQ96	22
HPV HR Detection Kit (RQ4)	HPVHR4RQ24	HPVHR4RQ48	HPVHR4RQ96	23

Real-Time PCR kits	24 rxn Cat No.	48 rxn Cat No.	96 rxn Cat No.	Page No.
HSV 1 and 2 Detection and Quantitation kit	HSVRQ24	HSVRQ48	HSVRQ96	24
HSV 1 and 2 Detection and Typing kit	HSVTypRQ24	HSVTypRQ48	HSVTypRQ96	25
HTLV I Detection and Quantitation kit	HTLVRQ24	HTLVRQ48	HTLVRQ96	26
JAK2 Mutation Detection and Quantitation kit	JAK2MQ24	JAK2MQ48	JAK2MQ96	53
JAK2 Mutation Detection kit	JAK2RQ24	JAK2RQ48	JAK2RQ96	54
JC Virus Detection and Quantitation kit	JCRQ24	JCRQ48	JCRQ96	27
JC-BK Detection and Quantitation Kit	BK-JCRQ24	BK-JCRQ48	BK-JCRQ96	28
KRAS Mutation Detection Kit	KRASRQ24	KRASRQ48	.....	55
Leishmania Detection Kit	LeishRQ24	LeishRQ48	LeishRQ96	29
Measles Detection Kit	MeaslesRQ24	MeaslesRQ48	MeaslesRQ96	30
Mpox Detection Kit	MPoxRQ24	MPoxRQ48	MPoxRQ96	31
MTHFR A1298C Mutation Detection kit	MTHFR1298RQ24	MTHFR1298RQ48	MTHFR1298RQ96	71
MTHFR C677T Mutation Detection kit (RQ)	MTHFR677RQ24	MTHFR677RQ48	MTHFR677RQ96	72
Mumps Virus Detection Kit	MumpsRQ24	MumpsRQ48	MumpsRQ96	32
Mycoplasma Detection Kit	MycoplasmaRQ24	MycoplasmaRQ48	MycoplasmaRQ96	33
Nocardia Detection Kit	NocardiaRG24	NocardiaRG48	NocardiaRG96	34
NRAS Detection Kit	NRASRQ24	NRASRQ48	.....	56
PAI-1 4G/5G Polymorphism Detection kit	PAIRQ24	PAIRQ48	PAIRQ96	73
ParvoVirus B19 Detection and Quantitation kit	ParvoRQ24	ParvoRQ48	ParvoRQ96	35
PML-RARA (bcr1) Detection and Quantitation kit	BCR1RQ24	BCR1RQ48	BCR1RQ96	57
PML-RARA (bcr2) Detection and Quantitation kit	BCR2RQ24	BCR2RQ48	BCR2RQ96	58
PML-RARA (bcr3) Detection and Quantitation kit	BCR3RQ24	BCR3RQ48	BCR3RQ96	59
PML-RARA 3X (bcr1,bcr2,bcr3) Detection kit	PML-RARA3XRQ24	PML-RARA3XRQ48	PML-RARA3XRQ96	60
Resp I Detection Kit	RespIRQ24	RespIRQ48	RespIRQ96	36
Resp II Detection Kit	RespIIRQ24	RespIIRQ48	RespIIRQ96	37
RSV Detection Kit	RSVRQ24	RSVRQ48	RSVRQ96	38
STI-3 Detection Kit	STI3RQ24	STI3RQ48	STI3RQ96	39
STI-7 Detection Kit	STI7RQ24	STI7RQ48	STI7RQ96	40
TB Detection and Quantitation kit	TBRQ24	TBRQ48	TBRQ96	41
Thrombo4X Mutation Detection kit	T4XRQ24	T4XRQ48	T4XRQ96	74
Toxo Detection Kit	ToxoRQ24	ToxoRQ48	ToxoRQ96	42
Trichomonas Detection Kit	TrichoRQ24	TrichoRQ48	TrichoRQ96	43
Ureaplasma Detection Kit	UreaRQ24	UreaRQ48	UreaRQ96	44
VZV Detection and Quantitation kit	VZVRQ24	VZVRQ48	VZVRQ96	45
WT1 Quantitation kit	WT1RQ24	WT1RQ48	WT1RQ96	61

# Alphabetical Index

## A

A1298C ..... 71, 72, 74  
A. flavus ..... 4, 5  
A. fumigatus ..... 4, 5  
A. niger ..... 4, 5  
A. terreus ..... 4, 5  
Abnormality ..... 47, 48, 49, 52, 57, 58, 59, 60, 74  
Acquired Immunodeficiency Syndrome (AIDS) ..... 21  
Acute flaccid paralysis ..... 14  
Acute lymphoblastic leukemia (ALL) ..... 48, 49, 52  
Acute myeloid leukemia (AML) ..... 47, 57, 58, 59, 60, 61  
Acute progranulocytic leukemia (APL) ..... 57, 58, 59, 60  
Adenoviridae ..... 3  
Aedes aegypti ..... 12  
Aedes albopictus ..... 12  
Albumin gene ..... 26  
Allergic reactions ..... 4, 5  
AML1-ETO ..... 47  
Angiogenesis ..... 65  
Ankylosing spondylitis ..... 68  
Anti-EGFR therapies ..... 51, 55  
Arterial thrombosis ..... 71, 72  
Arthritis ..... 68  
Aspergillus ..... 4, 5  
Asthma ..... 73  
Atherosclerosis ..... 71, 72, 73

## B

B locus ..... 67, 68, 69, 70  
Bacteria ..... 7, 33, 34, 41, 44  
Bacterial infections ..... 39  
BCR-ABL (p190) ..... 48  
Behcet's disease (BD) ..... 69  
BK Virus (BKV) ..... 6, 28  
Blood clot ..... 64, 65, 73  
Blood coagulation ..... 74  
BRAF ..... 50  
Breastfeeding ..... 26



Brucella ..... 7  
Brucella abortus ..... 7  
Brucella canis ..... 7  
Brucella melitensis ..... 7  
Brucella suis ..... 7  
Brucellosis ..... 7

## C

C677T ..... 71, 72, 74  
Cancer ..... 13, 22, 23, 50, 51, 55, 56, 71, 72, 73  
Cats ..... 42  
cell/cellular proliferation ..... 48, 49, 51, 53, 54, 56  
Central nervous system (CNS) ..... 19, 24, 27, 28  
Cervical cancer ..... 22, 23  
Chickenpox ..... 45  
Chlamydia trachomatis (CT) ..... 8, 39, 40  
Chorioamnionitis ..... 44  
Chromosome 6 ..... 67, 68, 69, 70  
Chromosome 7 ..... 73  
Chromosome 9 ..... 48  
Chromosome 22 ..... 48, 49  
Chronic myeloid leukemia (CML) ..... 48, 49  
Cirrhosis ..... 17, 18  
Class I surface antigen ..... 67, 68, 69, 70  
Clinical relevance ..... 71, 72  
Coagulation ..... 63, 64, 65, 74  
Cold ..... 10, 11, 37  
Cold-like symptoms ..... 15, 36, 37, 38  
Colorectal cancer ..... 50, 55, 56  
Compromised immune system ..... 3, 4, 5  
Congenital defects ..... 45  
Coronary heart disease ..... 71, 72  
COVID-19 ..... 10, 11, 36, 37  
Cytomegalovirus (CMV) ..... 9, 19

## D

Deep vein/ venous thrombosis (DVT) ..... 64, 73

Dengue .....	12
DENV-1 .....	12
DENV-2 .....	12
DENV-3 .....	12
DENV-4 .....	12

**E**

Encephalitis .....	20, 24, 25, 30, 32
Enterovirus .....	14
Epidermal Growth Factor Receptor (EGFR) .....	51, 55
Epididymitis .....	39, 40
Epstein-Barr Virus (EBV) .....	13, 19
Essential thrombocythemia (ET) .....	53, 54
ETV6-RUNX1 .....	52
Erythema infectiosum .....	35

**F**

F2 (G20210A) .....	63, 74
F5 (R506Q) .....	64, 74
F13 (Val34Leu) .....	65
Factor II (G20210A) .....	63, 74
Factor V Leiden (G1691A) .....	63, 64, 74
Factor XIII (Val34Leu) .....	65
Fibrin clots .....	65
Fibrin stabilizing factor .....	65
Fibrinolysis .....	73
Flagellated protozoan .....	43
Flaviviridae family .....	12
Flavivirus .....	12
Flu .....	11, 15, 36, 37
Flu-like symptoms .....	30, 31
Fungal .....	4, 5

**G**

G1691A .....	64, 74
G20210A .....	63, 74
Genetic abnormality .....	52
Genetic disorder .....	66

Genital diseases .....	25
Genital tract inflammation .....	44
Genitourinary tract .....	8
Glioblastoma .....	51

**H**

HCV Genotype .....	17
Hematopoiesis .....	52
Hemochromatosis .....	66
Hepatitis B Virus (HBV) .....	16
Hepatitis C Virus (HCV) .....	17, 18
Hepatocellular carcinoma .....	17, 18
Hereditary hemochromatosis .....	66
Herpes Panel .....	19
Herpes Simplex Virus (HSV) .....	24, 25
Herpes zoster .....	45
Herpesviridae Family .....	9, 13, 19, 20, 45
HFE gene .....	66
HHV-1 .....	24, 25
HHV-2 .....	24, 25
HHV-4 .....	13
HHV-5 .....	9
HHV-6 .....	20
HIV-1 .....	21
HIV-2 .....	21
HIV/AIDS .....	27, 28
HLA-B18 .....	67
HLA-B27 .....	68
HLA-B51 .....	69
HLA-B52 .....	70
Homocysteine .....	71, 72
HPIV-1 .....	37
HPIV-2 .....	37
HPIV-3 .....	37
HPIV-4 .....	37
HSV-1 .....	19, 24, 25
HSV-2 .....	19, 24, 25

## Alphabetical Index (Continued)

HTLV-I	26
HTLV-II	26
Human Herpes Virus (HHV)	24, 25
Human Herpesvirus 4 (HHV-4)	13
Human Herpesvirus 5 (HHV-5)	9
Human Immunodeficiency Virus (HIV)	3, 21
Human Influenza A and B virus	11, 15, 36, 37
Human leukocyte antigen	67, 68, 69, 70
Human Papilloma Virus (HPV)	22, 23
Human parainfluenza viruses (HPIV)	37
Human T-cell Lymphotropic Virus I (HTLV-I)	26
Hypercoagulability	74

### I

Immunocompromised	3, 9, 13, 30, 34, 38, 42
Immunodeficiency	3, 21, 27, 28
Infected animal	7
Infertility	8, 39, 40, 44
Influenza A/B	11, 15, 36, 37
Inherited	64, 74
Intracerebral hemorrhage	65
Iron accumulation	66

### J

JAK2 (Janus Kinase 2)	53, 54
JC Virus (JCV)	27, 28

### K

KRAS	55
------	----

### L

<i>L. aethiopica</i>	29
<i>L. donovani</i>	29
<i>L. infantum</i>	29
<i>L. major</i>	29
<i>L. tropica</i>	29

Leishmania	29
Leukemia	26, 47, 48, 49, 52, 56, 57, 58, 59, 60, 61
Liver fibrosis	67
Lymphoma	13, 26, 27, 28
Lymphoproliferative disorders	13

### M

<i>M. bovis</i>	41
<i>M. bovis</i> BCG	41
<i>M. tuberculosis</i> (TB)	41
Major histocompatibility complex (MHC)	67, 68, 69, 70
Malaria	29
Measles Virus (MeV)	30
Meat (Toxoplasmosis)	42
Melanoma	50, 56
Meningitis	14, 20, 32
Milk (Brucellosis)	7
Minimal residual disease (MRD)	57, 58, 59, 61
Miscarriage	73
Mold ( <i>Aspergillus</i> )	4, 5
Monkeypox	31
Mosquitoes	12
Mpox	31
MTHFR-1298	71, 74
MTHFR-677	72, 74
Multiple sclerosis (MS)	27, 28
Multiplex..	5, 10, 11, 12, 15, 17, 19, 22, 23, 28, 33, 36, 37, 39, 40, 74
Mutation	50, 51, 53, 54, 55, 56, 63, 64, 66, 71, 72, 74
Myeloid	47, 48, 49, 57, 58, 59, 60, 61
Myelopathy	26
Myeloproliferative disorders	53, 54
<i>Mycobacterium tuberculosis</i> complex (MTC)	41
Mycoplasma	33
Mycoplasma genitalium (MG)	33, 39, 40
Mycoplasma hominis (MH)	33, 40
Mycoplasmataceae	44
Myocardial infarction	65, 73

**N**

Nasopharyngeal carcinoma .....	13
Neisseria gonorrhoeae (NG) .....	39, 40
Nerve ganglia .....	45
Nervous system .....	20, 24, 27, 28
Nephropathy (PVAN) .....	6, 28
Neural tube defects .....	71, 72
Nocardia .....	34
Nocardiosis .....	34
Non-Small Cell Lung Cancer (NSCLC) .....	50, 51, 55
NRAS .....	56

**O**

Oncogene .....	48, 49, 50, 51, 56
Orthomyxoviridae family .....	11, 15, 36, 37
Orthopoxvirus .....	31
Osteoporosis .....	71, 72

**P**

PAI-1 4G/5G polymorphism .....	73
Pandemics .....	11, 15, 36, 37
Papillomaviridae family .....	22, 23
Paramyxoviridae family .....	15, 30, 32, 36, 37, 38
Parasite .....	29, 43
Parasitic protozoan .....	29, 42
Parvoviridae family .....	35
Parvovirus B19 .....	35
Pelvic inflammatory .....	8, 39, 40
Philadelphia chromosome .....	48, 49
Phlebotomine sand flies .....	29
Picornaviridae .....	14
Plasminogen activator inhibitor 1 (PAI-1) .....	73
PML (promyelocytic) .....	57, 58, 59, 60
PML-RARA (bcr1) .....	57
PML-RARA (bcr2) .....	58
PML-RARA (bcr3) .....	59
PML-RARA 3X (bcr1, bcr2, bcr3) .....	60

Pneumonia .....	30
Polycythemia vera (PV) .....	53, 54
Polymorphism .....	65, 71, 72, 73
Polyomavirus .....	6, 27, 28
Pregnancy/Pregnant .....	31, 35, 42, 43, 44, 45, 63, 64, 65
Preterm birth .....	44
Primary myelofibrosis (PMF) .....	53, 54
Progressive multifocal leukoencephalopathy (PML) .....	27, 28
Prothrombin .....	63
Psoriasis .....	68
Pulmonary embolism (PE) .....	64, 65
Pulmonary infection .....	26

**R**

R506Q .....	64
Reproductive tract infections .....	33
Resp I .....	36
Resp II .....	37
Respiratory .....	3, 10, 11, 14, 15, 30, 32, 35, 36, 37, 38
Respiratory Syncytial Virus (RSV) .....	15, 36, 37, 38
Respiratory tract infections .....	15, 36, 37, 38
Retrovirus .....	21, 26

**S**

Salpingitis .....	39, 40
SARS-CoV-2 .....	10, 11, 36, 37
Seasonal flu .....	11, 15, 36, 37
Sepsis .....	73
Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) .....	10, 11, 36, 37
Sexual contact .....	26
Sexually transmitted diseases (STDs) .....	25, 33
Sexually transmitted infections (STI) .....	8, 39, 40, 43
Shingles .....	45
Subacute thyroiditis .....	67
Subtropical regions .....	12, 29

## Alphabetical Index (Continued)

### T

Takayasu arteritis (TA) ..... 70  
TEL-AML1 ..... 52  
Thrombin ..... 63  
Thrombo4X ..... 74  
Thrombophilia ..... 74  
Thrombosis ..... 63, 64, 71, 72, 73, 74  
Thyroid carcinomas ..... 50  
Toxoplasma gondii ..... 42  
Toxoplasmosis ..... 42  
Transcripts ..... 47, 48, 49, 52, 57, 58, 59, 60, 61  
Translocation ..... 47, 48, 49, 52, 57, 58, 59, 60  
Transplant/ Transplantation ..... 3, 6, 9, 13, 20, 26, 27, 28  
Trichomonas vaginalis ..... 40, 43  
Trichomoniasis ..... 43  
Triplex ..... 20, 25, 44  
Tropical ..... 12, 29  
Tuberculosis ..... 29, 41  
Typhoid ..... 29

### W

Weakened immune systems ..... 31  
Wilms' Tumor1 (WT1) ..... 61

### Z

Zoonotic diseases ..... 7, 31

### U

Ulcerative colitis (UC) ..... 70  
Ureaplasma parvum (UP) ..... 40, 44  
Ureaplasma urealyticum (UU) ..... 40, 44  
Urethritis ..... 43  
Urogenital tract ..... 44  
Uveitis ..... 68

### V

Val34Leu ..... 65  
Vaginitis ..... 43  
Varicella Zoster Virus (VZV) ..... 19, 45  
Venous thromboembolism (VTE) ..... 63, 64, 65

## Notes

## Notes





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