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# REAL TIME PCR

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# State-of-the-Art 150,000 Sq. Ft. Fully Automated Manufacturing Facility in Manesar, India



Novel, Robust  
& Cost-Effective  
Molecular and  
Genetic Diagnostic  
Solutions



CE IVD

ISO  
13485:2016

ISO  
9001:2015

GMP  
Compliant

G2M

We take pride in being the leading manufacturers of highly accurate and robust IVD solutions across the country at the most competitive prices to make impactful changes in the diagnostic & patient care industry.

Since its inception in 2016, Genes2me has been constantly striving towards setting a benchmark in the diagnostics space by introducing premium quality (Made in India) diagnostic kits which are CE-IVD, ISO-13485, and ISO 9001:2016 certified, assuring our clients of unparalleled quality and compliance with international standards. Our product portfolio includes molecular POC testing solutions, RT-PCR kits, rapid antigen/antibody testing kits, and molecular biology reagents. We have broadened our horizons to include Next Generation Sequencing clinical panels to cater to personalised medicine for every patient.

The company's flagship products like Rapi-Q/ Rapi-Q HT Point-of-Care (POC) RT-PCR devices are trailblazing inventions that are changing the paradigm of molecular POC testing across the world. These platforms help to detect infectious diseases with utmost sensitivity and least turnaround time thus helping in effective treatment and timely containment of the infection.

Our NGS clinical panels are designed to encompass testing solutions for oncology, liquid biopsy, cardiovascular diseases, neurological disorders, and HLA typing. These panels are compatible with the most popular sequencing platforms, Illumina, MGI, Thermo Fisher and Element Bio Sciences. We also offer cloud-based interpretation bioinformatics software with our NGS clinical panels which is designed to interpret data in a flexible and user-friendly manner. We ensure the highest standards for compliance at our lab and manufacturing site and have thus obtained all necessary accreditations and licences to run the same. Our lab is accredited by the National Accreditation Board for Testing and Calibration Laboratories (NABL), ISO 9001, and ISO 14001. Our manufacturing site is approved by Drugs Controller General of India (DCGI) & is fortified by the prestigious ISO-13485 accreditation.



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 **EML4-ALK**  
**Adenovirus**  
**Meningitis**  
**STIs** **KRAS**  
**TB-MDR** **HIV** **Hepatitis B**  
**EGFR** **Herpes Simplex virus**  
**Mycoplasma hominis** **Hepatitis B**  
**RT-PCR**  
**AMR** **HLA B27**  
**Beta Thalassemia**  
**Ureaplasma parvum** **ParaFlu**  
**Norovirus** **Sepsis**  
**Varicella zoster** **Tuberculosis**  
**Trichomonas Vaginalis**



**HPV**  
 Thrombosis  
**Respiratory**  
 Measles  
**UTI** **HCV** **HBV**  
 PML-RARA

Neisseria gonorrhoeae  
 MTB-NTM  
**BRAF**  
 Toxoplasma gondii  
 Parainfluenza

**80+**  
 ASSAYS

# KITS

**H3N2** **BCR-ABL**  
**Jak2** *Ureaplasma urealyticum*  
**SCA** **FLT-3**  
 Human Papillomavirus  
*Helicobacter pylori* *Bordetella pertussis*  
**Influenza A/B**  
 Gastrointestinal

## KEY FEATURES



High Sensitivity & Specificity



Comprehensive Molecular Workflow Solutions



Compatible with all Common Platforms



Multiplex and Singleplex Assays



Reliable Results with Endogenous Internal Control



Extensively Validated on wide variety of Clinical Specimens



Aligned with Reference Controls



Quick Turnaround Time

# RAPi Cycler 96

## Real-Time PCR System

Designed to meet the experimental needs of high-end laboratories

With the 4 or 6 fluorescence channels, RapiCycler 96 can process 96 samples in one run.

The system supports various downstream applications including Qualitative/quantitative analysis, absolute/relative quantitation, melting curve analysis, standard curve/dissociation curve analysis, Multiplex PCR, SNP genotyping, HRM, allele identification, temperature gradient function, etc.

Easy to process with the powerful and efficient temperature control system and fluorescence system.

Easy to-use software with user friendly operational designs.

### Salient Features

The real-time fluorescence quantitative PCR instrument uses semiconductor technology to quickly implement the PCR amplification process, and uses a high sensitivity photoelectric detection system to detect the fluorescence signal in real time (standard/ fast mode) analyse and process it through powerful analysis software.

Sample dynamic range 1- 10°C

Wide Temperature range 0- 100°C

Gradient range 1°C- 42°C

RapiCycler 96 Real-Time PCR System is a peltier based system designed for experimental analyses characterized by Polymerase Chain Reaction (PCR) for the purpose of DNA/RNA detection, and can be widely used in a variety of areas including:

- Clinical Diagnosis
- Epidemiological Monitoring
- Forensics &
- Scientific Research
- Food Safety





## EFFICIENT FLUORESCENCE

- The 4 or 6 fluorescence channels compatible with most of the common fluorescent dyes and probes of regular detection reagents.
- Strong fluorescence signal, low background noise and high sensitivity.
- All channels are detected synchronously, and all fluorescent channels of 96 samples are detected within 5s.
- Designed with LED light source, energy saving, environmental protection, long service life, and maintenance-free.

## POWERFUL TEMPERATURE CONTROL



- The maximum heating ramp rate is  $8^{\circ}\text{C}/\text{s} \pm 0.1^{\circ}\text{C}/\text{s}$  for quicker completion of assay.
- With the temperature accuracy and uniformity of  $\pm 0.25^{\circ}\text{C}$  to ensure accurate results.
- With over-current, over-temperature, power-down data self-recovery and other protection functions to ensure the safe operation of the experiment.



## USER FRIENDLY

- PC operation, one computer can control multiple instruments, and can run multiple groups of experiments at any time.
- Automatic hot lid, which can be used with automated workstation to improve work efficiency.

## POWERFUL SOFTWARE



- Capable of various data analysis to meet the needs of most experiments, including qualitative analysis, SNP genotyping, absolute quantitative analysis, relative quantitative analysis, genotyping, endpoint fluorescence analysis, melting curve analysis, pathogen detection, plus/minus assays etc.
- Software complied with security access, auditing & e-signature
- Automated result interpretation and analysis report.

## Ordering Information

CAT #	Description
G2MRAPI4001	RapiCycler 96 Real Time PCR System (4 channel)
G2MRAPI4002	RapiCycler 96 Real Time PCR System (6 channel)

# Analyzing *Complex* Rare Diseases



- BCR-ABL Universal Real Time PCR Kit
- BCR-ABL Quantitative Real Time PCR Kit
  - BCR-ABL Real Time PCR Kit
  - HLA B27-Q Real Time PCR Kit
  - PML-RARA Real Time PCR Kit
    - Jak2-Q Real Time PCR Kit
    - EGFR-Q Real Time PCR Kit
    - BRCA-Q Real Time PCR Kit
    - EML4-ALK Real Time PCR Kit
    - KRAS-Q Real Time PCR Kit
    - FLT3-Q Real Time PCR Kit
  - AML1 Fusion Real Time PCR Kit
    - BRAF-Q Real Time PCR Kit
    - PIK3CA-Q Real-Time PCR Kit
    - NRAS Real-Time PCR Kit





# Oncology

Molecular markers can be used to provide accurate prognosis and to predict response, resistance, or toxicity to therapy.

Quantitative real-time PCR can determine gene duplications, deletions and can identify small mutations, down to single base changes. Real-time PCR methods are a favourable option for the analysis of cancer markers as they are easier, faster and can be multiplexed.

The assay is based on amplification of target DNA by the Polymerase Chain Reaction (PCR) and nucleic acid hybridization.

## Sensitivity & Specificity

Kits with high sensitivity and specificity to detect up to 1% of mutant allele among background of 99% wild type allele.

## Highly Accessible

Compatible with commonly available Real Time PCR instruments.

# BCR-ABL Detection

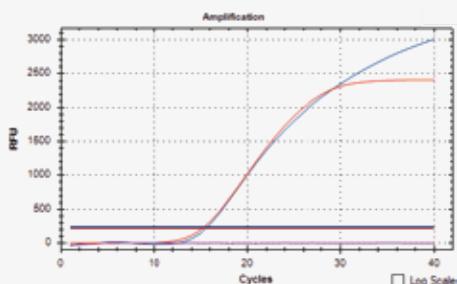
- BCR-ABL is a chromosomal abnormality of chromosome 22, also called as the Philadelphia chromosome.
- It happens as a result of reciprocal translocation between chromosome 9 and chromosome 22 often abbreviated as t(9;22).
- The presence of BCR-ABL fusion gene is strongly associated with chronic myeloid leukemia (CML) as well as acute myeloid leukemia (AML).
- BCR-ABL1 fusion gene encodes for a tyrosine kinase enzyme which is responsible for the uncontrolled growth of leukemic cells.

 **Sample Source :** Peripheral blood samples & Bone marrow

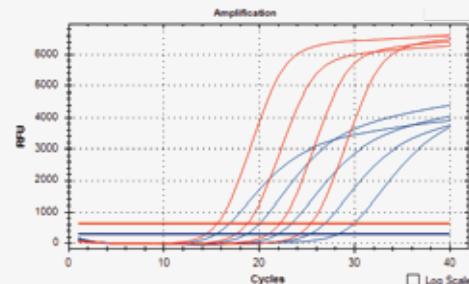
## BCR-ABL Universal Real Time PCR Kit

BCR-ABL Quantitative RT PCR kit helps in the detection and differentiation of all the 3 break point cluster regions i.e. major/P210 (M-bcr), minor/P190 (m-bcr) and micro/P230 (mu-bcr), along with quantification of the major/P210 (M-bcr) transcript.

Fusion transcripts detected : Major-p210 - [e14a2 & e13a2] - qualitative & quantitative  
Minor-p190 - [e1a2]  
Micro-p230 - [e19a2]



BCR-ABL Major Real Time PCR specific amplification plot of BCR-ABL positive sample (FAM channel) along with ABL Internal Control (Texas Red channel).



BCR-ABL Real Time PCR specific amplification plot of BCR-ABL standard (FAM channel) along with Internal Control ABL standard (Texas Red channel).

## BCR-ABL Quantitative Real Time PCR Kit

BCR-ABL Quantitative RT PCR kit helps in the quantitative detection of the major/P210 (M-bcr) transcript.

**Fusion transcripts detected :** Major-p210 - [e14a2 & e13a2]

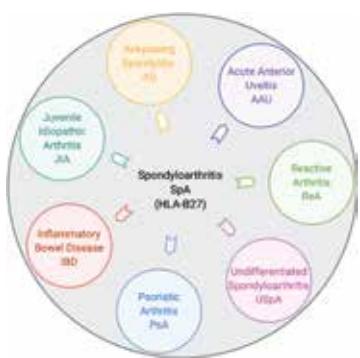
## BCR-ABL Real Time PCR Kit

BCR-ABL RT PCR kit helps in the qualitative detection and differentiation major/P210 (M-bcr), minor/P190 (m-bcr) and micro/P230 (mu-bcr) transcripts.

**Fusion transcripts detected :**  
Major-p210 - [e14a2 & e13a2]  
Minor-p190 - [e1a2]  
Micro-p230 - [e19a2]

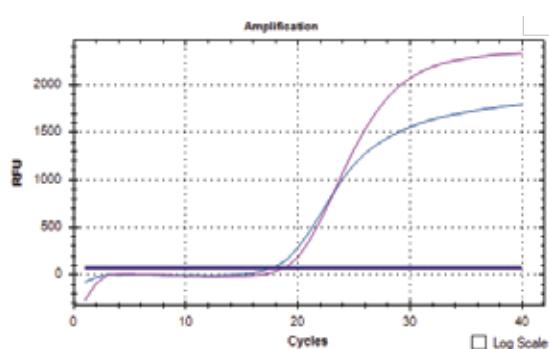
## HLA B27-Q Real Time PCR Kit

- HLA (Human Leukocyte Antigens) B27 is a major histocompatibility complex (MHC) class I molecule.
- These are cell-surface glycoproteins expressed on most nucleated human cells and platelets.
- Present in 8% of normal population as it is an integral part of the immune system.
- Found in 90% of the patients with Ankylosing Spondylitis (AS) - chronic inflammatory disease of the axial musculoskeletal system.
- It is also associated with certain rheumatic disorders like Reiter's syndrome, acute anterior uveitis, and inflammatory bowel disease.
- HLA B27-Q RT PCR Kit helps in amplification of allelic region of HLA B27 gene present on chromosome 6 using specific primer & probe pairs.



Sample Source : Peripheral blood samples

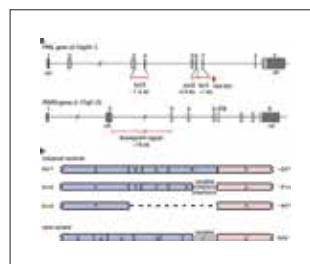
Target : B Locus in the MHC region on chromosome 6



HLA-B27-Q Real Time PCR specific amplification plot of HLA-B27 positive sample (FAM channel) along with Internal Control (Cy5 channel).

## PML-RARA-Q Real Time PCR Kit

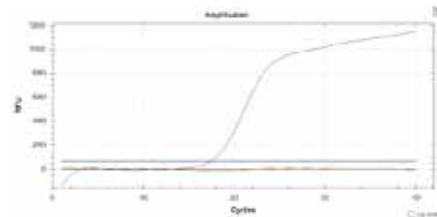
- PML-RARA fusion genes is a result of translocation between the Retinoic acid receptor alpha (RARA) gene on chromosome 17 & the Promyelocytic leukemia (PML) gene on chromosome 15 t(15;17) (q24;q21).
- It is characteristic of acute promyelocytic leukemia (APL) where it is responsible for cellular transformation.
- Depending on the breakpoint used and as a result of splicing, three different PML-RARA fusion transcripts can be generated, including the long (also known as L or bcr1 isoform), variant (V or bcr2), and short (S or bcr3) isoforms.
- PML-RARA-Q RT PCR kit helps in multiplex detection & differentiation of bcr1, bcr2 and bcr3 fusion transcripts along with Endogenous internal control.



Sample Source : Peripheral blood samples & Bone marrow.

## JAK2-Q Real Time PCR Kit

- This protein is part of a signalling pathway called the JAK/STAT pathway, which transmits chemical signals from outside the cell to the cell's nucleus.
- A specific point mutation in this gene, namely, V617F, replaces the normal amino acid valine with phenylalanine, leading to uncontrolled blood cell production.
- The JAK2 V617F mutation is an acquired, somatic mutation present in the majority of patients with myeloproliferative cancer (myeloproliferative neoplasms) i.e. nearly 100% of patients with polycythemia vera and in about 50% of patients with essential thrombocythemia and primary myelofibrosis.
- JAK2-Q RT PCR Kit detects the V617F point mutation with high sensitivity and specificity.



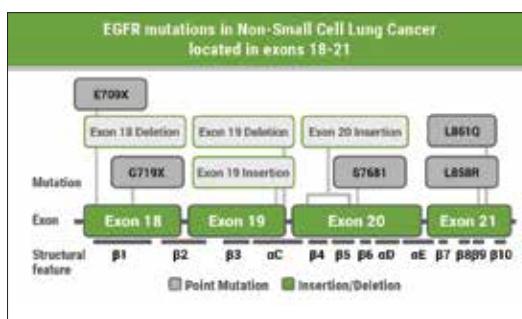
JAK2 Real Time PCR specific amplification plot of JAK2 positive sample (FAM channel) along with internal control (HEX channel).

Mutations covered : V617F point mutation

Sample Source : Peripheral blood samples

## EGFR-Q Real Time PCR Kit

- EGFR is currently the most important molecular target for the treatment of non-small cell lung cancer (NSCLC).
- Phosphorylation of EGFR can promote tumor cell growth, differentiation, invasion, metastasis, anti-apoptosis, and promote tumor angiogenesis.
- NSCLC accounts for about 80% of lung cancer patients, which is the leading cause of cancer deaths worldwide.
- EGFR-Q RT PCR kit helps in qualitative detection of common mutations across four exons 18-21 of the EGFR gene in human NSCLC samples.



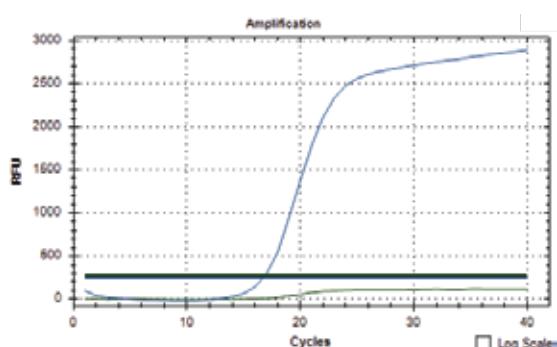
### Mutations covered :

19del (19 deletions in exon 19), L858R, T790M, G719X, 3Ins20, L861Q, S768I.



### Sample Source :

Peripheral blood samples & FFPE tissues.



EGFR-Q Real Time PCR specific amplification plot of EGFR positive sample (FAM channel) along with internal control (HEX channel).

## BRCA-Q Real Time PCR Kit

- BRCA1 and BRCA2 genes are the two most common Tumor Suppressor genes.
- Mutations in these genes can lead to an increased risk of developing breast, ovarian, and prostate cancer.
- BRCA-Q Real Time PCR Kit is a qualitative in vitro test for the detection of BRCA1 & BRCA2 gene mutations in clinical samples.
- Helps in detection and allelic differentiation of six somatic mutations - five mutations of BRCA1 gene and one mutation of BRCA2 gene.



### Mutations covered :

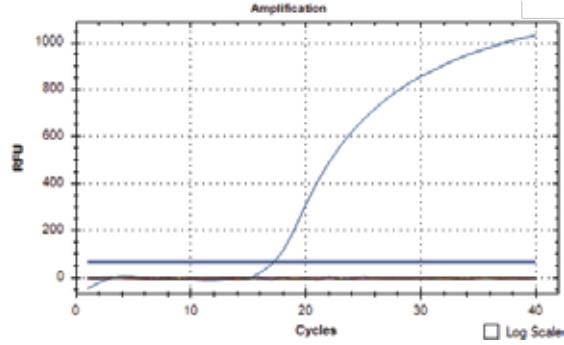
**BRCA1 gene mutations :** 185delAG, 300T>G, 4153delA, 5382insC, 2080delA

**BRCA2 gene mutation :** 6174delT



### Sample Source :

Peripheral blood samples



BRCA Real Time PCR specific amplification plot of BRCA positive sample (FAM channel) along with internal control (Cy5 channel).

## EML4-ALK Real Time PCR Kit

### Including ROS1 Mutations

- Gene rearrangements between EML4 (gene and echinoderm microtubule-associated protein-like 4) and ALK (anaplastic lymphoma kinase) genes result in EML4-ALK fusion genes.
- These are located on the P21 and P23 bands on chromosome 2 in humans.
- These are characteristic of 5% NSCLC and 3-13% of lung tumors.
- 20 different fusion variants are present- where mutant 1 (E13; A20) is the most common one, followed by mutants 3a and 3b (E6; A20).
- EML4-ALK RT PCR kit detects 12 common fusion mutations of EML4-ALK & 14 types of ROS1 fusion gene mutations in human known-small cell lung cancer samples.

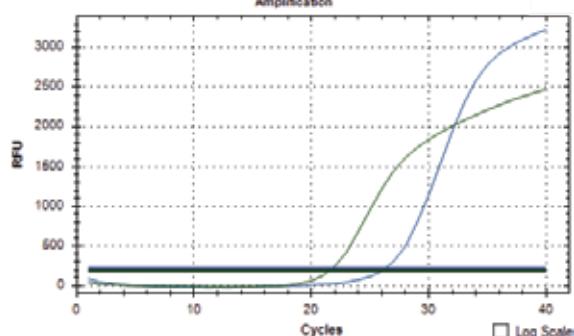


#### Mutations covered :

Variant 1, Variant 2, Variant 3a, Variant 3b, Variant 4, Variant 5a, Variant 5b, Variant 5', Variant 6, Variant 7, Variant 8a, Variant 8b.



#### Sample Source :



EML4-ALK Real Time PCR specific amplification plot of EML4-ALK positive sample (FAM channel) along with internal control (Cy5 channel).

## KRAS-Q Real Time PCR kit

- KRAS gene, instructs production of K-Ras protein, a part of the RAS/MAPK pathway.
- Mutations in K-ras result in continuous malignant proliferation of cells and resistance to EGFR tyrosine kinase inhibitors in lung cancer patients and resistance to anti-EGFR antibody drugs in colorectal cancer patients.
- Mutations in KRAS gene have been found in some types of cancer, including non-small cell lung cancer (15%-30%), colorectal cancer (20%-50%), and pancreatic cancer.
- KRAS-Q Real Time PCR kit is intended for detection of 8 mutations in codons 12 and 13 of exon 2.

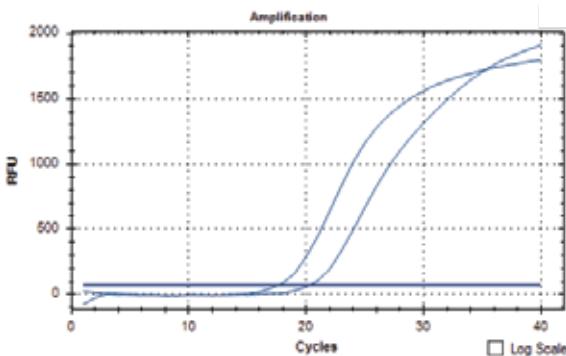


#### Mutations covered :

Exon 12, Gly12Ala, Gly12Asp, Gly12Arg, Gly12Cys, Gly12Ser, Gly12Val, Exon 13, Gly13Asp, Gly13Cys.



#### Sample Source :



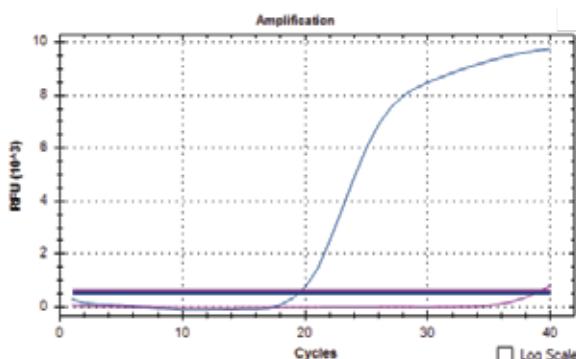
KRAS-Q Real Time PCR specific amplification plot of KRAS positive sample (FAM channel) along with internal control (Cy5 channel).

## FLT3-Q Real Time PCR kit

- The FMS-like tyrosine gene (FLT3) codes for a transmembrane receptor/ signalling protein (FLT3) of the tyrosine kinase group.
- It is involved in cell growth and inhibition of apoptosis.
- Variants of FLT3 have been found in some hematopoietic neoplasms and are particularly common in adult acute myeloid leukemia (AML) (20% to 30% incidence rate).
- FLT3-Q Real-Time PCR Kit is based on real-time PCR in combination with gel-based technology, for the Qualitative detection of internal tandem duplications (ITD) and tyrosine kinase domain (TKD) mutation.


**Mutations covered :**

Internal tandem duplications (ITD).  
D835Y mutation in the Tyrosine kinase domain (TKD).

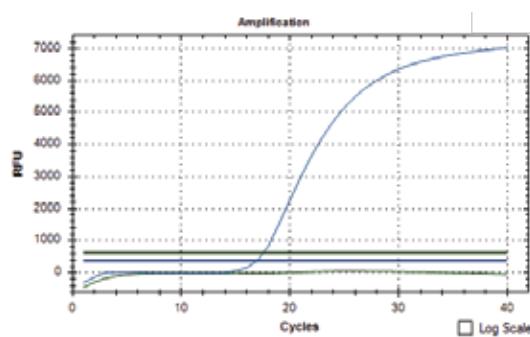

**Sample Source :** Peripheral blood samples


FLT3 Real Time PCR specific amplification plot of FLT3 positive sample (FAM channel) along with internal control (HEX channel).

## BRAF-Q Real Time PCR kit

- The protein encoded by the BRAF gene is a serine/threonine specific protein kinase that exists in the cytoplasm.
- It is an important signal regulator in the RAS/RAF/MEK/ERK/MAPK pathway, and is involved in the regulation of various biological activities in cells, such as cell growth, differentiation and apoptosis.
- BRAF mutations are commonly found in malignant tumours such as melanoma, colorectal cancer, thyroid cancer, and lung cancer.
- BRAF-Q Real Time PCR kit is intended for detection of BRAF gene V600E mutation on exon 15- the most common one.


**Mutations covered :** V600E mutation.

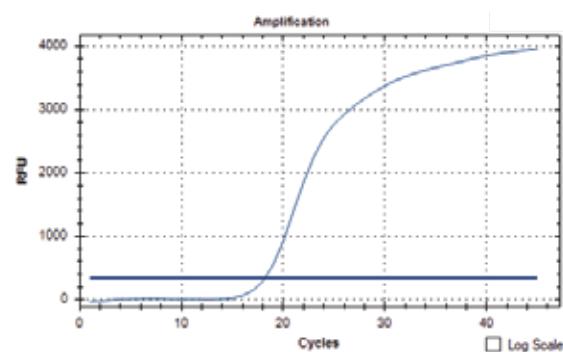
**Sample Source :** FFPE tissues.


BRAF Real Time PCR specific amplification plot of BRAF positive sample (FAM channel) along with internal control (HEX channel).

## AML1 Fusion Real Time PCR kit

- The leukemic fusion protein AML1-ETO occurs frequently in human acute myeloid leukemia (AML).
- AML1 fusion Real Time PCR Kit is an in vitro diagnostic test for the qualitative detection of fusion of AML1 & ETO genes in clinical samples.
- In vitro detection of AML1-ETO fusion gene transcripts [AML1 exon 5 is fused to ETO exon 2].


**Mutations covered :** AML1-ETO.

**Sample Source :** Peripheral blood samples


Amplification plot of AML 1 fusion positive control

## PIK3CA Real Time PCR Kit

- PIK3CA gene encodes the p110 $\alpha$  catalytic subunit of phosphatidylinositol-3-kinase and is essential for important physiological functions such as regulating cell proliferation, survival, death, and differentiation.
- Mutations in the PIK3CA gene are known to directly or indirectly affect the medication and prognosis of colorectal, breast, lung, cervical cancers, etc. and hence accurate diagnosis is critical.
- The mutation rates are 26% for breast cancer, 25% for colorectal cancer, and 2% for lung cancer, with mutation sites concentrated in exon 9 and 20.
- The five most common mutations were E542K, E545K, E545D and H1047R/L, among which E542K accounted for 5.7%, E545K 8.5%, E545D 0.2% and H1047R/L 18.8%.
- PIK3CA-Q RT PCR Kit helps in the qualitative detection of the common PIK3CA gene mutations in human clinical samples.



**Mutations covered :** E542K, E545K, E545D, H1047R, H1047L



**Sample Source :** Fresh tissue, formalin fixed paraffin-embedded (FFPE)

## NRAS Real Time PCR kit

- NRAS belongs to the Ras family of oncogenes which encodes for N-ras protein, primarily involved in regulating cell growth and differentiation.
- It is a GTPase protein which are central mediators downstream of growth factor receptor signaling and function by relaying signals from outside the cell to the cell's nucleus.
- NRAS is altered in 3.03% of all cancers with cutaneous melanoma, melanoma, colon adenocarcinoma, acute myeloid leukemia, and lung adenocarcinoma having the greatest prevalence of alterations.
- The most common mutations in the NRAS gene are found in codons 12, 13 and 61 leading to uncontrolled proliferation and cancerous transformation of normal cells.
- NRAS RT-PCR is a quantitative test for the detection of 8 different mutations in the NRAS gene which are implicated in the pathogenesis of several cancers.



**Mutations covered :** Codon 12, 13 and 61: G12D, G13R, G13D, G13V, A59D, Q61R, K117N, A146T



**Sample Source :** Fresh, frozen or formalin fixed paraffin-embedded (FFPE) tissues

## Ordering Information

Commercial Name	Cat No.	Pack Size	Compatible Instruments
BCR-ABL Universal Real Time PCR Kit	G2M802721	50 T	Instruments with FAM, ROX, Cy5, HEX/VIC Channels including RAPICycler - 96, ABI Prism®7500 & Quantstudio, BioRad CFX96, Roche Lightcycler, Qiagen Rotor-Gene, etc.
BCR-ABL Quantitative Real Time PCR Kit	G2M802821	50 T	
BCR-ABL Real Time PCR Kit	G2M708921	50 T	
HLA B27-Q Real Time PCR Kit	G2M801121	50 T	
PML-RARA Real Time PCR Kit	G2M708821	50 T	
Jak2-Q Real Time PCR Kit	G2M802621	50 T	
EGFR-Q Real Time PCR Kit	G2M708121	25 T	
BRCA-Q Real Time PCR Kit	G2M802521	50 T	
EML4-ALK Real Time PCR Kit	G2M708321	50 T	
KRAS-Q Real Time PCR Kit	G2M708421	25 T	
FLT3-Q Real Time PCR Kit	G2M709021	50 T	
AML1 Fusion Real Time PCR Kit	G2M802921	50 T	
BRAF-Q Real Time PCR Kit	G2M708521	25 T	
PIK3CA-Q Real-Time PCR Kit	G2M708221	25 T	
NRAS Real-Time PCR Kit	G2M708621	25 T	

# Analyzing *Complex* Rare Diseases



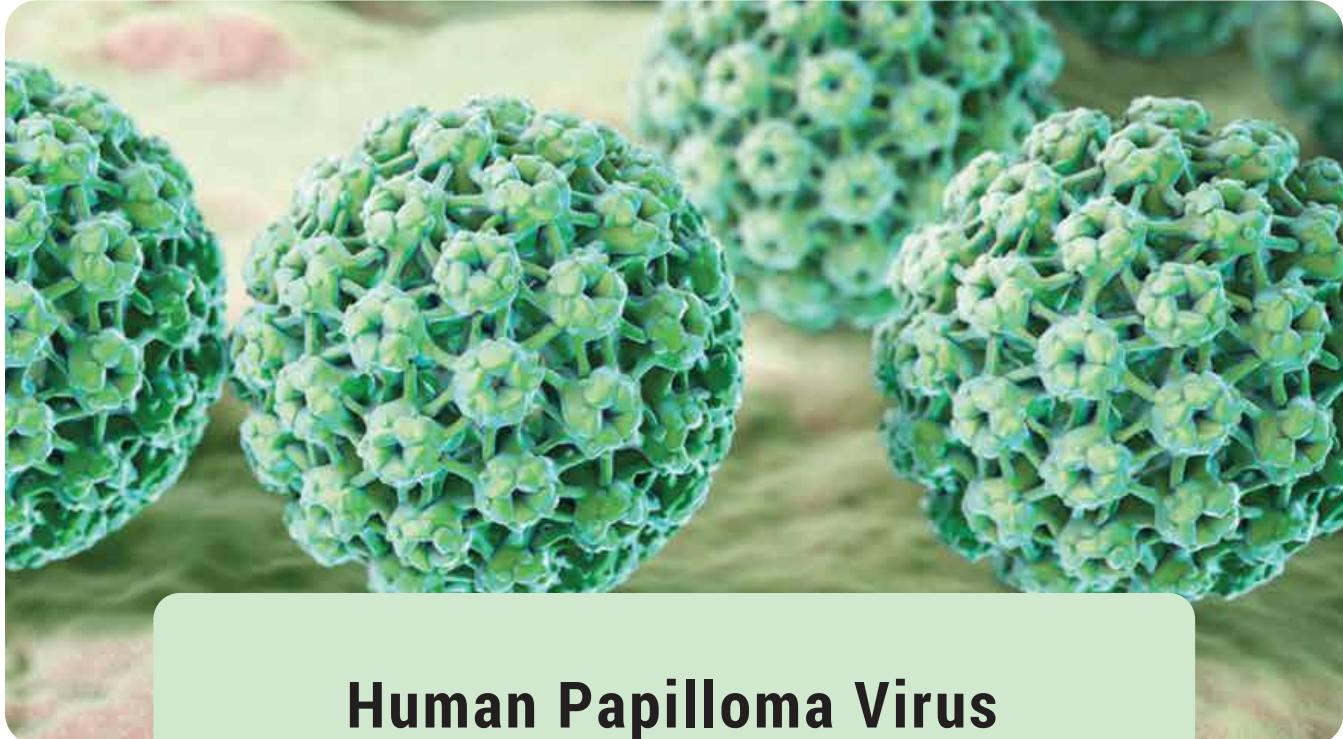
- HPV-Q Comprehensive Real Time PCR Kit
  - HPV-Q Real Time PCR Kit
- HPV-Q+ Comprehensive Real Time PCR Kit
  - HPV-Q+ Real Time PCR Kit
- STI- Q Comprehensive Real Time PCR Kit
  - STI7-Q Real Time PCR Kit
  - TGC-III Real Time PCR Kit
- C.Trachomatis-Q Real Time PCR Kit
- U. Urealyticum-Q Real Time PCR Kit
- Mycoplasma Hominis (MH) Q Real Time PCR Kit
  - HSV-Q Real Time PCR Test Kit
- Trichomonas Vaginalis (TV) Q Real Time PCR Kit
- Neisseria Gonorrhoeae (NG) Q Real Time PCR Kit
  - Toxo-Q Real Time PCR Kit
  - Syphilis-Q Real Time PCR Kit
  - HHV-Q Real Time PCR Kit





# Reproductive Health

Genes2Me RT-PCR Kits offer efficient qualitative clinical diagnosis of patient specimens associated with inflammatory diseases, bacterial infection in reproductive organs, infertility and sexually transmitted infections (STIs).



## Human Papilloma Virus (HPV) Detection

- DNA viral infection caused by Human Papilloma Virus (HPV) infects various human cells including skin & epithelial mucosal cells. Some HPV infections cause no symptoms while others are highly pathogenic.
- Among different types of HPV, some genotypes leads to serious health problems, including genital warts, pre-cancerous lesions, mouth/ throat, cervical, vaginal and penile cancers which may be transmitted either via skin to skin contacts or sexual transmission.
- High Sensitivity & Specificity :  $\geq 99\%$ .
- Compatible With Commonly Available Instruments with FAM, ROX, Cy5, HEX/VIC Channels including RAPICycler-96, ABI Prism®7500 & Quantstudio, BioRad CFX96, Roche Lightcycler, Qiagen Rotor-Gene, etc.
- Sample Source : Vaginal swabs/Cervical swabs & urine

## HPV-Q Comprehensive Real Time PCR Kit

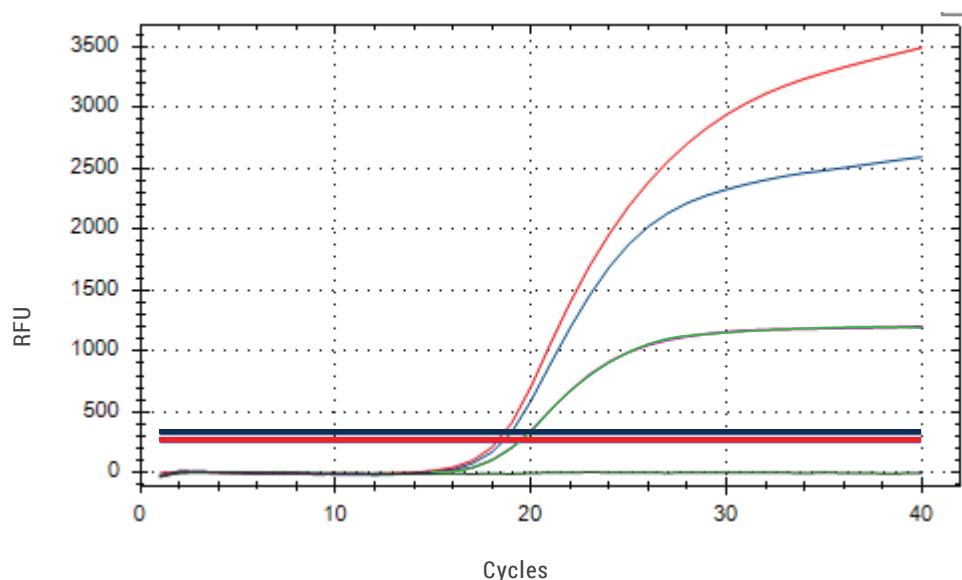
- Comprehensive Real Time PCR in vitro diagnostic test for the detection of 28 HPV genotype including high risk HPV and low risk HPV genotypes in DNA extracted from clinical samples.
- Qualitative detection of
  - 12 High Risk genotypes including HPV 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66, 68
  - 14 Medium-Low risk genotypes including HPV 6, 11, 83, 54, 26, 81, 61, 44, 40, 43, 42, 82, 53, 73
- Differential identification of HPV16 and HPV18 genotype.

## HPV-Q Real Time PCR Kit

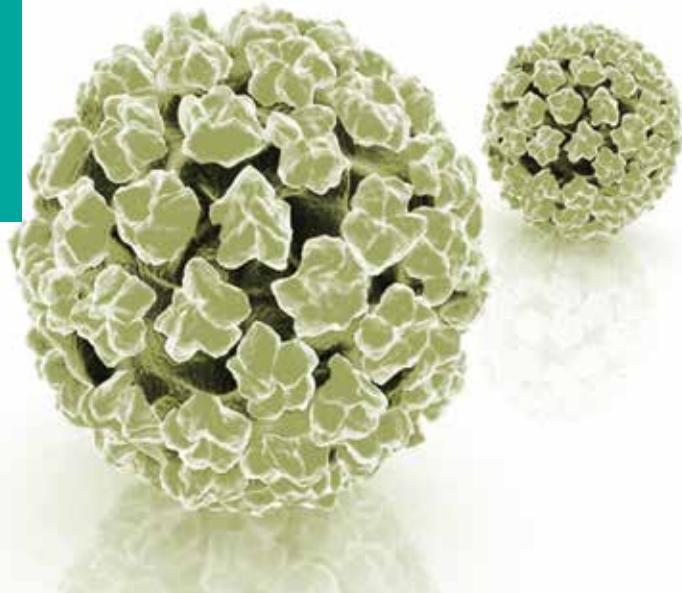
Multiplex diagnostic kit is designed for HPV identification using E6/E7 gene specific targets for 14 High Risk Genotypes using specific primers and fluorescent labeled probes.

### Qualitative Screening of 14 High Risk Genotypes

- Allows differential identification of HPV 16, HPV 18
- 12 other pooled High Risk HPV genotypes including HPV 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66, 68
- Separate dyes for following HPV genotypes :
  - HPV 16 (HEX)
  - HPV 18 (ROX)
  - 12 pooled High risk HPV genotypes (FAM)
  - Endogenous control :  $\beta$ -actin (Cy5)



Amplification patterns obtained with the multiplex assay on plasmid DNA ( $10^5$  copies of plasmid/ $\mu$ L). The curves were generated by amplification of target specific positive control DNA of pooled plasmids for HPV16, HPV18 and other 12 HR- HPV genotypes.



## Human Papilloma Virus (HPV) Detection

### **HPV-Q<sup>+</sup> Comprehensive Real time PCR Kit**

A comprehensive solution for the multiplex detection and differentiation of all the HPV genotypes.

**28 High, Medium & Low Risk Genotypes :** HPV 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66, 68, 6, 11, 83, 54, 26, 81, 61, 44, 40, 43, 42, 82, 53, 73

### **HPV-Q<sup>+</sup> Real time PCR Kit**

This kit is designed for the detection of 12 High Risk HPV genotypes along with 5 genotypes which are vaccine targets of HPV and can thus be used for screening purposes.

**12 High Risk Genotypes :** HPV 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66, 68

**5 Vaccine target Genotypes :** HPV 16, 18, 6, 11, 44



## Comprehensive Panel for Sexually Transmitted Infections

### STI-Q Comprehensive Real Time PCR Kit

#### Comprehensive Multiplex Real Time PCR Kit

Aims to qualitatively detects & differentiates 13 causative organisms for Sexually Transmitted Infections in clinical samples along with parallel detection of Internal control.

#### Pathogens Covered

- Mycoplasma genitalium
- Mycoplasma hominis
- Neisseria gonorrhoeae
- Trichomonas vaginalis
- Ureaplasma parvum
- Ureaplasma urealyticum
- Herpes Simplex Virus -1
- Herpes Simplex Virus -2
- Treponema pallidum (Syphilis)
- Candida albicans
- Toxoplasma gondii
- Haemophilus ducreyi
- Chlamydia trachomatis

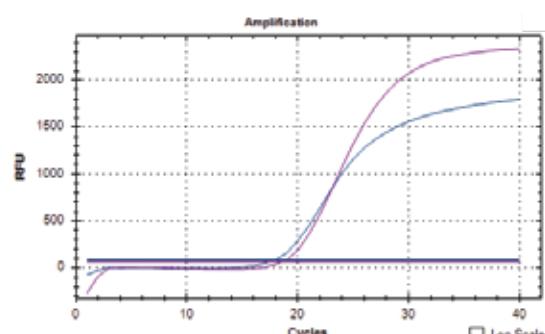
### STI7-Q Real Time PCR Kit

#### Comprehensive Multiplex Real Time PCR Kit

Qualitative detection & differentiation of 7 major sexually transmitted infections (STIs) causative pathogens in clinical samples along with parallel detection of Endogenous Internal control.

#### Pathogens Covered

- Mycoplasma genitalium
- Mycoplasma hominis
- Neisseria gonorrhoeae
- Trichomonas vaginalis
- Ureaplasma parvum
- Ureaplasma urealyticum
- Herpes Simplex Virus-1 & 2
- Chlamydia trachomatis



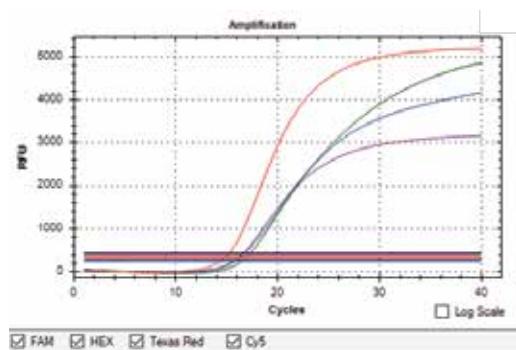
STI7-Q Real Time PCR specific amplification plot of Herpes Simplex Virus-1 positive sample (FAM channel) along with Internal Control (Cy5 channel).

## TGC-III Real Time PCR Kit

- Trichomonas vaginalis causes trichomoniasis, which is the most common pathogenic infection that transmits usually via direct, skin-to-skin contact with an infected individual, most often through vaginal intercourse.
- Gardenella vaginalis, another anaerobic bacterium that resides in vaginal flora, if overgrows becomes dominant species and leads to bacterial vaginosis, the most common cause of vaginal discharge, with increased risk of acquired HIV and other STIs.
- Candida spp., the most common fungal pathogens, causes Candidal vulvovaginitis that occurs when the species superficially penetrate the mucosal lining of the vagina and cause an inflammatory response leading to thick adherent discharge, vaginal itching and burning.
- The symptoms of these infections are quite similar, thus are difficult to diagnose and also detect risk factors during pregnancy.
- TGC-III RT PCR Kit is designed as a multiplex real-time polymerase chain reaction, containing specific primer pairs and fluorescent probes to detect and differentiate T. vaginalis, G. vaginalis and Candida spp in vaginal swab samples.


**Mutations covered :**

Trichomonas vaginalis, Gardenella vaginalis, Candida spp.


**Sample Source :** Vaginal and endocervical swabs


Amplification plot of Spiked positive control of Trichomonas vaginalis, Gardenella vaginalis, Candida spp.

## C.Trachomatis-Q Real Time PCR Kit

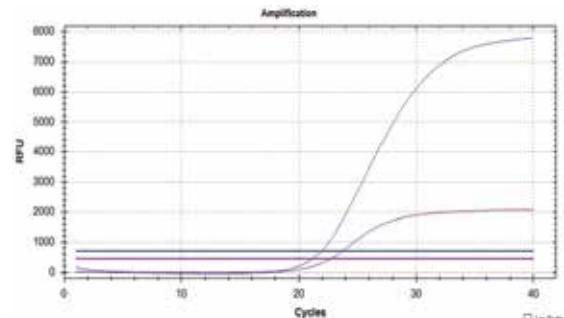
Detection of Chlamydia trachomatis in clinical samples.


**Target covered :** dnaB gene

## U. Urealyticum-Q Real Time PCR Kit

Detection of Ureaplasma urealyticum in clinical samples using target sequence within the urease complex.

⊕ **Target :** ABC transporter permease gene



Urealyticum Real Time PCR specific amplification plot of Ureaplasma urealyticum positive sample (FAM channel) along with Internal Control (Cy5 channel).

## M. Hominis (MH)-Q Real Time PCR Kit

- Detection of Mycoplasma hominis (MH) bacterial strain specific gene in clinical samples.

⊕ **Target covered :** tuf gene

## HSV-Q Real Time PCR Kit

- Multiplex assay for detection of Herpes Simplex Virus 1 (HSV-1) and Herpes Simplex Virus 2 (HSV-2) in clinical samples.

⊕ **Targets covered :** HSV-1: glycoprotein D (gD) gene  
HSV-2: US6 gene

## T. Vaginalis (TV)-Q Real Time PCR Kit

- Detection of Trichomonas vaginalis (TV) specific malic enzyme gene in human samples.

## N. Gonorrhoeae (NG)-Q Real Time PCR Kit

- Detection of Neisseria Gonorrhoeae specific DNA in clinical samples.



**Target covered:** fitA gene

## Toxo-Q Real Time PCR Kit

- Toxoplasma gondii infection causes toxoplasmosis forming tissue cysts, most commonly in skeletal muscle, brain, and eyes; which may remain throughout the life of the host.
- Diagnosis of congenital infections can be achieved by detecting B1 gene of T. gondii in amniotic fluid using real-time PCR.



**Target covered:** ITS1 gene

## Syphilis-Q Real Time PCR Kit

- Detection of Treponema pallidum specific gene with Taqman Chemistry on Real Time PCR based methodology.



**Target covered:** 16S rRNA gene

## HHV-Q Real Time PCR Kit

Identification and differentiation of Human Herpesvirus variants HHV6/7/8 in clinical samples.

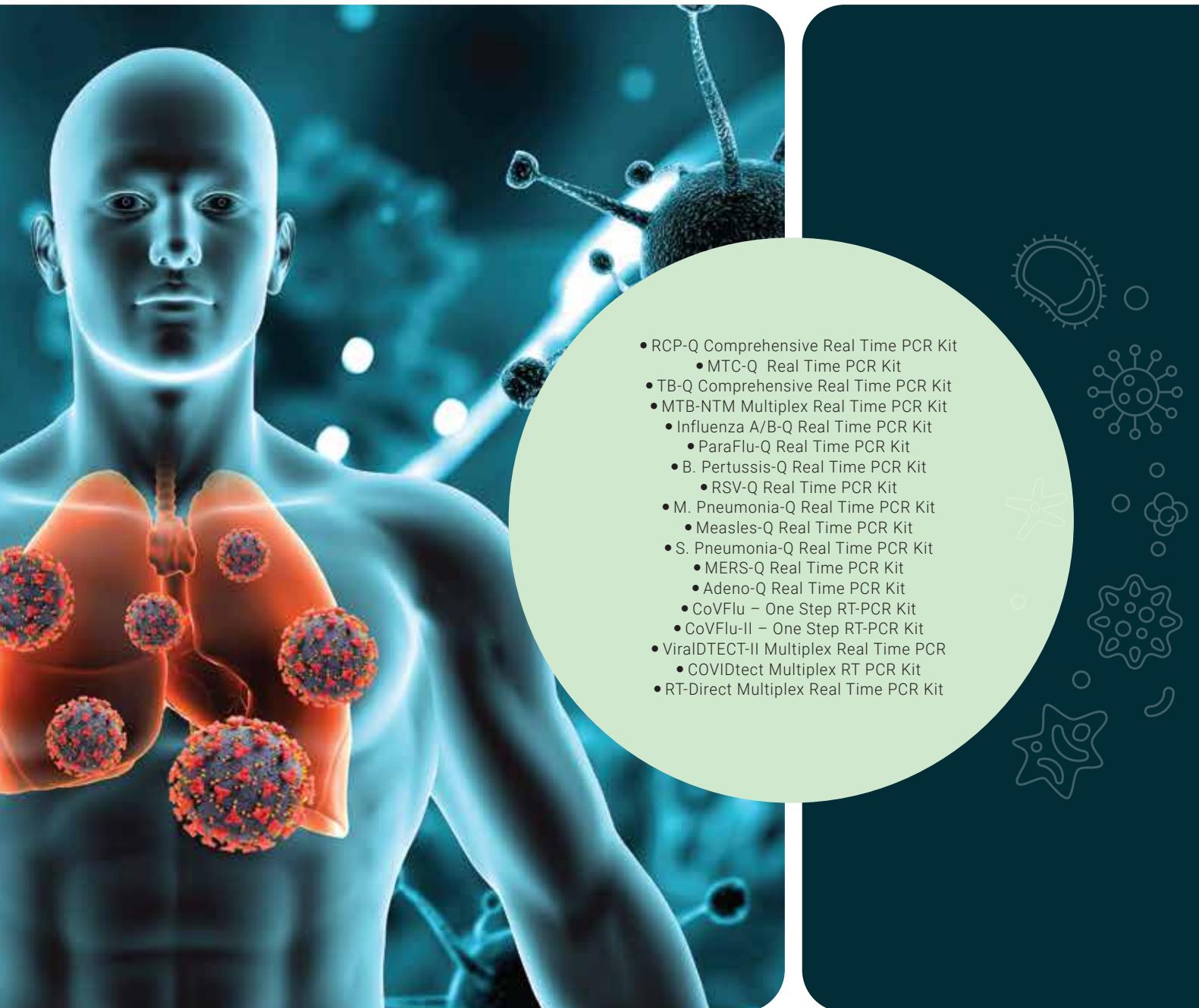


**Variants covered:**  
HHV6 specific - U31 gene.  
HHV7 specific - U57 gene.  
HHV8 specific - ORF65 gene.

## Ordering Information

Commercial Name	Cat No.	Pack Size	Compatible Instruments
HPV-Q Comprehensive Real Time PCR Kit	G2M803921	50 T	Instruments with FAM, ROX, Cy5, HEX/VIC Channels including RAPICycler - 96, ABI Prism®7500 & Quantstudio, BioRad CFX96, Roche Lightcycler, Qiagen Rotor-Gene, etc.
HPV-Q Real Time PCR Kit	G2M706721	50 T	
HPV-Q+ Comprehensive Real Time PCR Kit	G2M803921 <sup>+</sup>	50 T	
HPV Q <sup>+</sup> Real Time PCR Kit	G2M706721 <sup>+</sup>	50 T	
STI-Q Comprehensive Real Time PCR Kit	G2M803721	50 T	
STI7-Q Real Time PCR Kit	G2M709121	50 T	
C.Trachomatis-Q Real Time PCR Kit*	G2M804025	50 T	
U. Urealyticum-Q Real Time PCR Kit	G2M801421	50 T	
Mycoplasma Hominis (MH) Q Real Time PCR Kit	G2M707221	50 T	
HSV-Q Real Time PCR Test Kit	G2M705221	50 T	
Trichomonas Vaginalis (TV) Q Real Time PCR Kit	G2M706621	50 T	
Neisseria Gonorrhoeae (NG) Q Real Time PCR Kit	G2M706421	50 T	
Toxo-Q Real Time PCR Kit*	G2M709621	50 T	
Syphilis-Q Real Time PCR Kit	G2M705521	50 T	
HHV-Q Real Time PCR Kit	G2M802421	50 T	

# Analyzing *Complex* Rare Diseases



- RCP-Q Comprehensive Real Time PCR Kit
  - MTC-Q Real Time PCR Kit
- TB-Q Comprehensive Real Time PCR Kit
- MTB-NTM Multiplex Real Time PCR Kit
  - Influenza A/B-Q Real Time PCR Kit
  - ParaFlu-Q Real Time PCR Kit
  - B. Pertussis-Q Real Time PCR Kit
  - RSV-Q Real Time PCR Kit
- M. Pneumonia-Q Real Time PCR Kit
  - Measles-Q Real Time PCR Kit
  - S. Pneumonia-Q Real Time PCR Kit
    - MERS-Q Real Time PCR Kit
    - Adeno-Q Real Time PCR Kit
    - CoVFlu – One Step RT-PCR Kit
    - CoVFlu-II – One Step RT-PCR Kit
- ViralDTECT-II Multiplex Real Time PCR
  - COVIDtect Multiplex RT PCR Kit
  - RT-Direct Multiplex Real Time PCR Kit

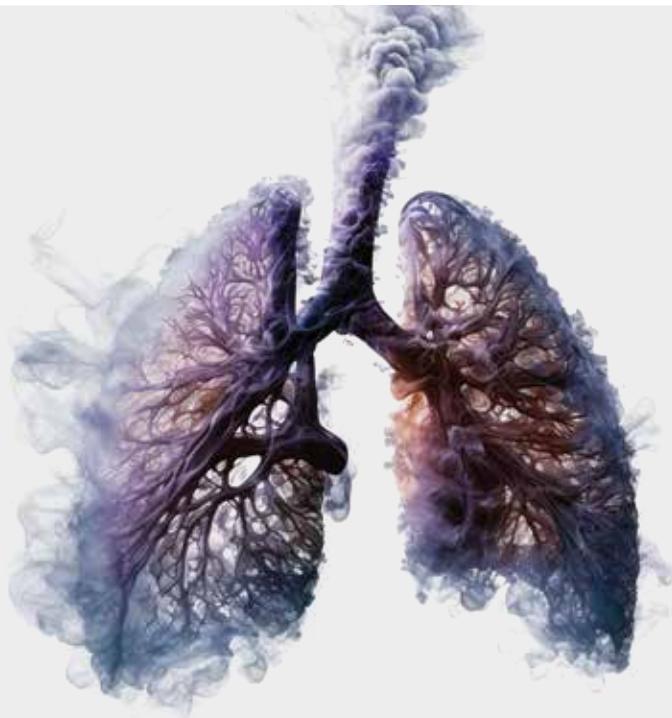


# Respiratory Disease Diagnostics

Respiratory tract infections and lung diseases are a significant global health concern, leading to a wide range of illnesses and posing considerable challenges for healthcare systems.

Molecular diagnostics have emerged as a powerful tool in understanding the prevalence and impact of these infections enabling the precise identification of respiratory viruses, including influenza, respiratory syncytial virus (RSV), rhinovirus, and coronaviruses like COVID-19.

Here's an in-depth look at the various RT-PCR kits offered by Genes2Me to uncover the prevalence of respiratory viral infections.



## **RCP-Q Comprehensive Real Time PCR Kit** (Respiratory Comprehensive Panel)

- Comprehensive Panel for Respiratory Diseases.
- Comprehensive assay for the detection and identification of 19 pathogens using one-step real-time RT-PCR.
- The RCP-Q kit is equipped to detect & differentiate a vast array of respiratory pathogens, including viruses and bacteria, all in a single test. This comprehensive coverage simplifies the diagnostic process & enables timely and precise identification.
- The Respiratory Panel amplifies a conserved microbial genome region, enabling parallel multiplex reactions in each tube to detect different targets using four unique dyes.

Targets Covered	19
TAT	90 minutes.
Pathogen List	Parainfluenza 1, Parainfluenza 2, Parainfluenza 3, Parainfluenza 4, Influenza A, Influenza B, Pandemic H1N1, Enterovirus, Bocavirus, Coronavirus OC43, Coronavirus NL63, Coronavirus 229E, Coronavirus HKU1, SARS-CoV-2, Human metapneumovirus, Parechovirus, Rhinovirus, RSV A/B, Adenovirus.
Sample Source	Human respiratory samples, sputum, tracheal aspirate, throat swab, nasopharyngeal swab.

# Mycobacterium Tuberculosis Detection

The Mycobacterium tuberculosis complex (MTC or MTBC) is a genetically related group of Mycobacterium species that cause tuberculosis in humans & spread via respiratory tract, digestive tract and skin injuries, thus affecting various organs and tissues.

People with prolonged infection or close contact with infected people are at particularly high risk and those with active but untreated tuberculosis may infect more people annually. Thus, Genes2Me qRT-PCR kits are designed for rapid and accurate detection of M.tuberculosis in patient specimens & preventing them from delayed diagnosis and severe health losses.

## MTC-Q Real Time PCR Kit

- Detection of Mycobacterium tuberculosis infection in clinical samples.
- Targets Covered: IS6110, MPt64 genes.

## TB-Q Comprehensive Real Time PCR Kit

- Allows for the simultaneous detection of MTB and MDR-TB (multi drug resistant tuberculosis) in human samples such as sputum, bronchoalveolar lavage (BAL), and culture specimens.
- Covers 16 mutations for the two first line drugs namely, Isoniazid (INH) and Rifampicin (RIF)
- Also includes the detection of four mutations in the katG gene, one mutation in the inhA gene, and 81 bp in the rpoB gene in patients with multidrug-resistant tuberculosis infection.

 **Target covered:** RRDR of rpoB, katG, inhA genes.

## MTB-NTM Multiplex Real Time PCR Kit

- Detects Non-tuberculosis mycobacterium infections causing lung diseases/ non causative agents of TB.
- Multiple NTM genotypes including: M. abscessus; M. avium; M. fortuitum; M. kansasii; M. intracellulare; M. massiliense; M. chimaera
- Accurate Detection and Differentiation of tuberculosis with NTM.
- Targets Covered: NTM specific - KU gene.  
MTB specific - MPt64 gene.

## ASSAY DESIGN



Sample Collection : Respiratory Sputum, Pulmonary or Extra Pulmonary samples & Bronchoalveolar lavage (BAL)



Extraction of Nucleic Acid



RT-PCR Detection



Analysis and Report

## Influenza A/B-Q (H1N1 & H3N2) Real Time PCR Kit

- Influenza is a viral illness primarily impacting the upper respiratory tract, typically lasting around a week which include symptoms like abrupt onset of high fever, muscle aches, headache, fatigue, a dry cough, sore throat, and runny nose.
- Multiplex kit for simultaneous detection & differentiation of Influenza A, Influenza B & Influenza A subtypes H1N1 & H3N2 virus specific RNA along with Internal control.
- Gene Targets covered : Influenza A - Matrix protein 2 (M2) gene, Influenza B- Nonstructural protein 1 (NS1) gene and Influenza A subtypes - H1N1 & H3N2 - HA gene.

Targets Covered	04
TAT	60 minutes.
Gene List	<b>Influenza A</b> - Matrix protein 2 (M2) gene, <b>Influenza B</b> - Nonstructural protein 1 (NS1) gene, <b>Influenza A subtype H1N1</b> - HA gene, <b>Influenza A subtype H3N2</b> - HA gene.
Sample Source	Human respiratory samples, sputum, tracheal aspirate, nasopharyngeal aspirate, throat swab, nasopharyngeal swab.

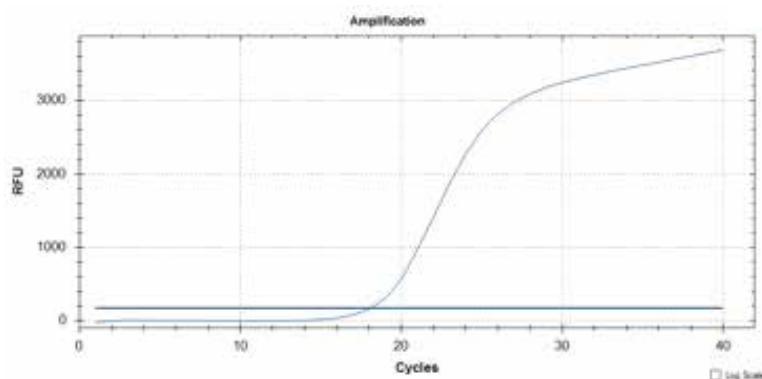


Image 1: Influenza A, B & H1N1

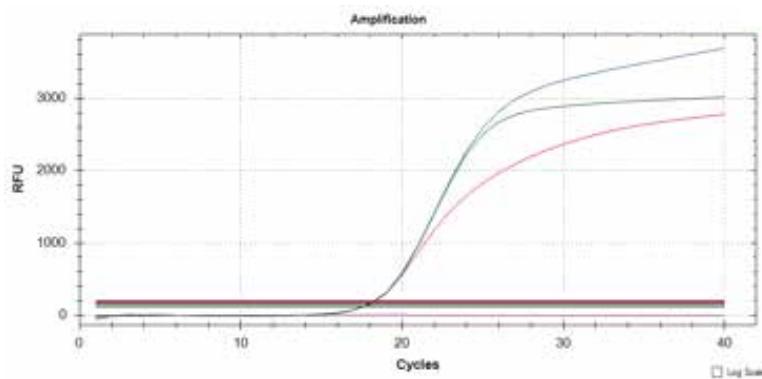


Image 2: Influenza H3N2

## ParaFlu-Q Real Time PCR Kit

- Human parainfluenza viruses (HPIVs) commonly cause upper and lower respiratory illnesses in infants, young children, older adults, and people with weakened immune systems.
- Identification and differentiation of Parainfluenza variants in clinical samples from patients with signs and symptoms of respiratory infection.



**Targets covered :** Para1- HN gene; Para2,3,4- NP gene.

## B.Pertussis-Q Real Time PCR Kit

- Bordetella pertussis causes whooping cough, an acute respiratory infection marked by severe, spasmodic coughing episodes during the paroxysmal phase.
- Leukocytosis with lymphocytosis is also common during this phase of the illness.



**Targets covered :** Bordetella pertussis bacterial strain specific mnmG gene in posterior nasopharyngeal swab samples.

## RSV-Q Real Time PCR Kit

- Respiratory syncytial virus, or RSV is a common respiratory virus that usually causes mild, cold-like symptoms. Most people recover in a week or two, but RSV can be serious.
- Detection of RSV and differentiation between RSV subtype A and B specific RNA in clinical samples.



**Targets covered :** NS1 gene specific targets in nasopharyngeal/ oropharyngeal swab samples.

## M. Pneumonia-Q Real Time PCR Kit

- *Mycoplasma pneumoniae* bacteria commonly cause mild infections of the respiratory system (the parts of the body involved in breathing).
- Outbreaks occur mostly in crowded settings like schools, college residence halls, military training facilities, long-term care facilities, and hospitals.



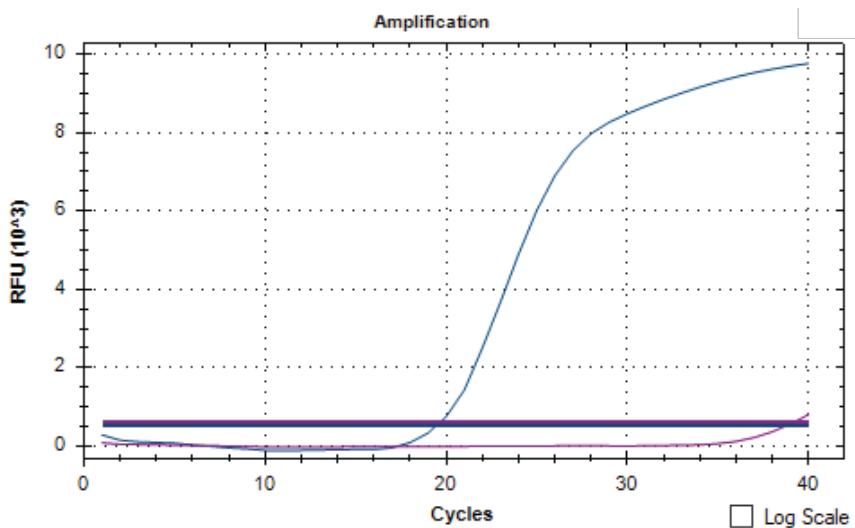
**Targets covered :** *Mycoplasma pneumonia* bacterial CARD4 toxin (annotated mpn 372) gene in nasopharyngeal fluid, sputum and throat swab samples.

## Measles-Q Real Time PCR Kit

- Measles is a highly contagious disease caused by a virus which spreads easily when an infected person breathes, coughs or sneezes and can result in severe complications, and sometimes even death.
- Detection of highly contagious infection of eyes, nose, skin & throat caused by Measles virus.



**Targets covered:** N gene, H genes specific targets from measles virus.



Measles Real Time PCR specific amplification plot of measles positive sample (FAM channel) along with internal control (HEX channel).

## S. Pneumonia-Q Real Time PCR Kit

- Streptococcus pneumoniae (the pneumococcus) is a major cause of morbidity and mortality as it is a common inhabitant of the respiratory tract.
- It causes a wide variety of diseases ranging from pneumonia, meningitis, otitis media, septicemia, and sinusitis to comparatively benign soft tissue infections.



**Targets covered:** Streptococcus pneumonia specific lytA gene in nasopharyngeal/ oropharyngeal swabs.

## MERS-Q Real Time PCR Kit

- Middle Eastern Respiratory Syndrome, or MERS was first reported in Saudi Arabia in the year 2012 which is a viral illness that causes severe lung infections and flu-like symptoms, with most patients developing pneumonia as a secondary infection.
- Detection of Middle East Respiratory Syndrome specific RNA in nasopharyngeal/ oropharyngeal swab samples.

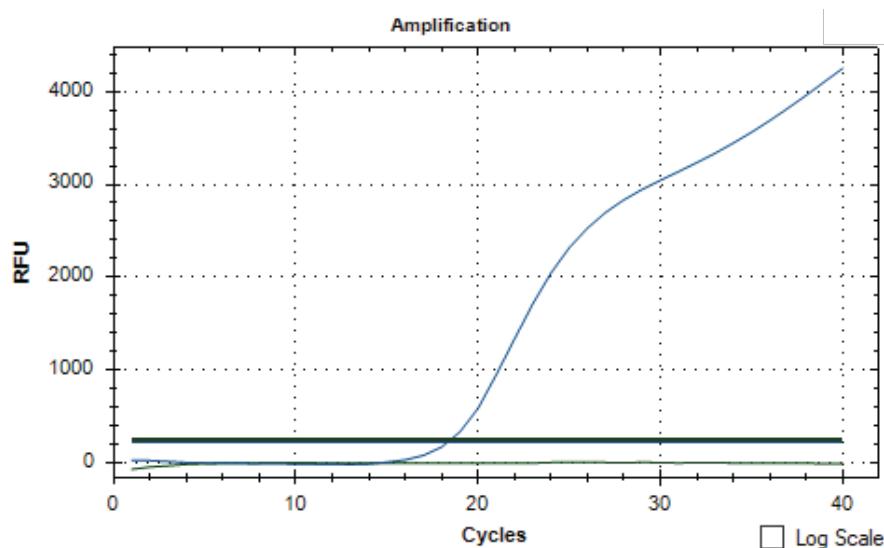


**Targets covered:** MERS specific ORF1 & upE genes.

## Adeno-Q Real Time PCR Kit

- Adenoviruses are a group of viruses that typically cause respiratory illnesses, such as a common cold, conjunctivitis (an infection in the eye that is sometimes called pink eye), croup, bronchitis, or pneumonia.
- Singleplex assay for detection of respiratory illness caused by Adenovirus.

**Targets covered:** Adenovirus specific L3 gene in nasopharyngeal/ oropharyngeal swabs.



Adeno-Q Real Time PCR specific amplification plot of Adeno positive sample (FAM channel) along with internal control (HEX channel).



## COVID-19 Solutions

### CoVFlu – One Step RT-PCR Kit

- CoVFlu stands as an exceptional diagnostic kit for extremely contagious respiratory diseases resulting from three distinct viruses: SARS-CoV-2, RSV and Influenza A/B.
- These viruses are transmitted through comparable means, such as respiratory droplets and aerosols, and manifest shared signs and symptoms, varying from mild to severe infections.
- Given the considerably higher transmission rates, severity of illness, complications, and mortality associated with COVID-19, there exists a critical requirement for the precise detection of Influenza A/B, RSV, and SARS-CoV-2 to ensure effective treatment and pharmaceutical interventions.
- CoVFlu is a multiplex RT-PCR kit which allows the co-detection of these 3 viruses.

Targets Covered	04
TAT	60 minutes.
Gene List	Influenza A-matrix protein 2 (M2) and matrix protein 1 (M1) & B- nuclear export protein (NEP); COVID-19- RdRp, N genes; RSV- NS1 gene.
Sample Source	Nasopharyngeal & Oropharyngeal swab.
Multi Target Design - differential labeled Probes	<ul style="list-style-type: none"> <li>• Influenza A/B Targets (FAM)</li> <li>• COVID-19 Targets i.e. RdRp &amp; N Gene (Texas Red)</li> <li>• RSV (Cy5)</li> <li>• RNaseP (HEX)</li> </ul>

### CoVFlu-II – One Step RT-PCR Kit

- Multi target design which allows for the simultaneous detection of multiple viral targets in a single sample which therefore, streamlines the diagnostic process.
- One step RT-PCR for qualitative & differential detection of SARS-CoV-2, Influenza A & B.

Kit Type	Pathogens and Dyes
Multiplex RT-PCR Kit	<ul style="list-style-type: none"> <li>• Influenza A Targets (HEX dye)</li> <li>• Influenza B Targets (Texas Red dye)</li> <li>• SARS-CoV-2 (FAM dye)</li> <li>• RNaseP (Cy5 dye)</li> </ul>

### ViralDTECT-II Multiplex Real Time PCR for COVID-19

- This kit is designed as a multiplex real-time reverse-transcription PCR system, containing specific primers & fluorescent probes targeting genes of interest.
- Detection of 3 genes along with Internal control E gene (FAM dye); RdRp gene (Texas Red dye); N gene (Cy5 dye); RNaseP (HEX dye).

## COVIDtect Multiplex RT PCR Kit for COVID-19

- This kit is an open-platform qualitative RT-PCR test utilizing Taqman Chemistry, designed for the in vitro detection of SARS-CoV-2 (COVID-19) in respiratory specimens, including nasopharyngeal swabs, oropharyngeal swabs, oropharyngeal washes, sputum, endotracheal aspirates, bronchoalveolar lavages, etc., from individuals suspected of having COVID-19.
- Detection of three genes i.e. S, RdRp and N gene (along with RNaseP as Internal Control).
- With no amplification in S gene ie S gene drop out, this test can be used as marker for possibility of Omicron variant.

## RT-Direct Multiplex Real Time PCR Kit for COVID-19

- It is based on the 'gold standard' RT-PCR method with coverage of three target genes specific to SARS-CoV-2.
- Superior coverage of 3 genes ie RdRp, N and E gene (along with RNaseP as Internal Control).
- Single tube Qualitative extraction free results.
- Easy to perform and saves time, cost and manpower as it does not require RNA extraction process.

## Ordering Information

Commercial Name	Cat No.	Pack Size	Compatible Instruments
RCP-Q Comprehensive Real Time PCR Kit	G2M803521	50 T	
MTC-Q Real Time PCR Kit	G2M707321	50 T	
TB-Q Comprehensive Real Time PCR Kit	G2M803121	50 T	
MTB-NTM Multiplex Real Time PCR Kit	G2M707421	50 T	
Influenza A/B-Q Real Time PCR Kit	G2M706021	50 T	
ParaFlu-Q Real Time PCR Kit	G2M801921	50 T	
B. Pertussis-Q Real Time PCR Kit	G2M706821	50 T	
RSV-Q Real Time PCR Kit	G2M801221	50 T	
M. Pneumonia-Q Real Time PCR Kit	G2M707721	50 T	
LP-MP Multiplex Real Time PCR Kit	G2M707921	50 T	
Measles-Q Real Time PCR Kit	G2M705721	50 T	
S. Pneumonia-Q Real Time PCR Kit	G2M706921	50 T	
MERS-Q Real Time PCR Kit	G2M802121	50 T	
Adeno-Q Real Time PCR Kit	G2M707821	50 T	
CoVFlu – One Step RT-PCR Kit	G2M272721	100 T	
CoVFlu-II – One Step RT-PCR Kit	G2M709821	100 T	
ViralDTECT-II Multiplex Real Time PCR for COVID-19	G2M020220	100 T	
COVIDtect Multiplex RT PCR Kit for COVID-19	G2M030321	100 T	
RT-Direct Multiplex Real Time PCR Kit for COVID-19	G2M020321	100 T	Instruments with FAM, ROX, Cy5, HEX/VIC Channels including RAPICycler - 96, ABI Prism® 7500 & Quantstudio, BioRad CFX96, Roche Lightcycler, Qiagen Rotor-Gene, etc.

# Analyzing *Complex* Rare Diseases



- Sepsis-Q Real Time PCR Kit
- Anti Microbial Resistance/AMR
- MCP-Q Comprehensive Real Time PCR Kit
  - Wound Panel Real Time PCR Kit
  - UTI-Q Panel Real Time PCR Kit
- GCP-Q Comprehensive Real Time PCR Kit
  - BK-Q Real Time PCR Kit
  - H. Pylori-Q Real-Time PCR Kit
  - EBV-Q Real Time PCR Kit
  - Nipah-Q Real Time PCR Kit
  - VZV-Q Real Time PCR Kit
- Human Parvovirus-Q Real Time PCR Kit
  - C. Albicans-Q Real Time PCR Kit
    - SS-Q Real Time PCR Kit
  - Rota-Q Real Time PCR Kit
  - EEC-Q Real Time PCR Kit
  - CMV-Q Real Time PCR Kit
  - Rubella-Q Real Time PCR Kit



# Infectious Diseases

For various viral infections, high sensitivity and specificity are required for early detection and prevention of further spread.

Qualitative detection of infectious diseases is accomplished by viral RNA detection using reverse transcription–polymerase chain reaction (RT-PCR) Kits.

## Sepsis-Q Real Time PCR Kit

- A condition commonly caused by inflammatory response of immune system to bacterial, viral, protozoan or fungal infections.
- Highly comprehensive assay for detection of 19 causative organisms including:

### Pathogens Covered

Staphylococcus aureus
Acinetobacter baumannii
Aspergillus fumigatus
Escherichia coli
Pseudomonas aeruginosa
Klebsiella pneumoniae
CoNS spp. Staphylococcus epidermidis
Staphylococcus haemolyticus
Enterococcus faecium
Listeria monocytogenes
Enterobacter cloacae
Streptococcus spp.
S. pyogenes & S. agalactiae
Enterococcus faecalis
Streptococcus pneumoniae
Stenotrophomonas maltophilia
Candida albicans
Candida nonalbicans - Candida parapsilosis, Candida tropicalis, and Candida krusei
Enterococcus gallinarum
Serratia marcescens
Candida non albicans - Candida auris & Candida glabrata
Campylobacter spp.
Salmonella enterica
Haemophilus influenzae - type B
Proteus mirabilis
Enterobacter aerogenes
Fusarium spp.
Bacteroides fragilis
Klebsiella oxytoca



Sample Source : Culture & whole blood samples.

## Anti Microbial Resistance AMR (MDR-Q Real Time PCR Kit)

This kit is used for in vitro qualitative detection of Klebsiella pneumoniae (KPN), Acinetobacter baumannii (Aba), Pseudomonas aeruginosa (PA) and four carbapenem resistance genes (which include KPC, NDM, OXA48 and IMP). Additionally, the assay detects Staphylococcus aureus by targeting the nuc gene and its methicillin-resistant mecA gene.

Antibiotic class	Prevalent genes
<b>Carbapenems</b>	NDM KPC VIM IMP OXA-48 OXA-23
<b>Methicillin</b>	mecA
<b>ESBLs</b>	TEM CTX-M SHV
<b>Vancomycins</b>	VanA VanB
<b>AmpC <math>\beta</math>-lactamase</b>	citM
<b>Trimethoprim/</b>	dfrA1
<b>Sulfamethoxazole (SXT)</b>	dfrA5 sul2
<b>Plasmid-mediated quinolone resistance (PMQR)</b>	aac6'-lb-cr
<b>Colistin</b>	citM



Sample Source : Human sputum samples, skin and soft tissue infection samples & whole blood samples.

## MCP-Q Comprehensive Real Time PCR Kit (Meningitis Comprehensive Panel)

Aims to qualitatively detects & differentiates causative organisms for major infections related to the inflammation of protective membranes of brain and spinal cord.

### Pathogens Covered

- Herpes simplex virus 1
- Herpes simplex virus 2
- Varicella-Zoster virus
- Parvovirus B19
- Human Herpesvirus 6 (HHV-6)
- Human Herpesvirus 7 (HHV-7)
- Enterovirus
- Parechovirus
- Haemophilus influenzae
- Neisseria meningitidis
- Streptococcus pneumoniae



## Wound Panel\* Real Time PCR Kit

- Wound infections caused by various pathogens can retard the healing process by increasing complications and delaying the treatment of the wound.
- The wound panel is designed to assess the wound infections that are caused by a range of bacterial and fungal pathogens.
- The test offers valuable insights to healthcare providers to make targeted treatment decisions and optimal wound care management.

### Pathogens Covered

- *Staphylococcus aureus*
- *coNs* (*Staphylococcus epidermidis* & *Staphylococcus haemolyticus*)
- *Pseudomonas aeruginosa*
- *E. Coli*
- *Klebsiella pneumoniae*
- *Klebsiella oxytoca*
- *Enterococcus faecalis*
- *Proteus mirabilis*
- *Proteus vulgaris*
- *Acinetobacter baumanii*
- *Citrobacter freundii*
- *Citrobacter koseri*
- *Enterobacter cloacae*
- Group A & B Haemolytic streptococcus
- *Morganella morganii*
- *Bacteroides spp*
- *Clostridium spp*
- *Candida Non alibicans*
- *Peptostreptococcus spp*
- *Fusobacterium spp*
- *Actinomycetes spp*
- *Aspergillus sp.*
- *Fusarium sp.*
- *Candida parapsilosis*
- *C. tropicalis*
- *C. glabrata*
- *Aspergillus sp.*
- *C. albicans*

\*RUO only



Sample Source : Wound samples

## UTI-Q panel\* Real Time PCR Kit

- Urinary tract infections (UTIs) can be chronic, recurrent or even lethal, wherein identification of the cause of infection is instrumental in combating it.
- Conventional culture-based methods can be combined with the faster and accurate RT-PCR based approach to attain higher level of sensitivity in detecting high risk dangerous and complicated pathogens.
- Multiplexed detection offered by RT-PCR helps in choosing the appropriate antibiotic for each infection.
- UTI Real time PCR kit enables qualitative detection and differentiation of 23 UTI-causing microbiota (bacteria and fungi) in a multiplexed and cost-effective manner.

### Pathogens Covered

- Escherichia coli
- Klebsiella pneumonia
- Pseudomonas aeruginosa
- Acinetobacter baumannii
- Proteus mirabilis
- Proteus vulgaris
- Citrobacter freundii
- Enterobacter aerogenes
- Enterobacter cloacae
- Klebsiella oxytoca
- Morganella morganii
- Providencia stuartii
- Serratia marcescens
- Staphylococcus saprophyticus
- Streptococcus agalactiae
- Staphylococcus aureus
- Enterococcus faecalis
- Enterococcus faecium
- Candida albicans
- Candida glabrata
- Candida krusei
- Candida parapsilosis
- Candida tropicalis

\*RUO only

 Sample Source : Urine

## GCP-Q Comprehensive Real Time PCR Kit (Gastro-intestinal Comprehensive Panel)

Aims to identify and differentiate major target pathogens of gastro-intestinal infections in clinical samples.

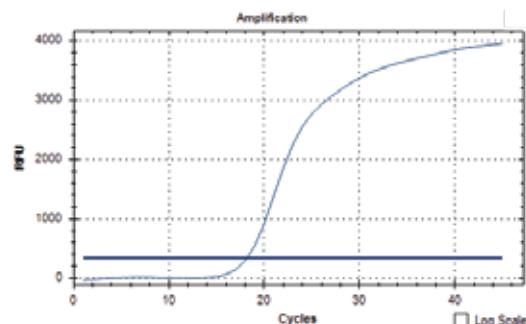
### Pathogens Covered

- Astrovirus
- Rotavirus
- Norovirus Genotype I & Norovirus Genotype II
- Adenovirus
- Clostridium difficile
- Campylobacter spp.
- Salmonella spp.
- enteroinvasive E.coli (EIEC)/Shigella spp.
- verotoxigenic E.coli (VTEC)
- Yersinia enterocolitica
- Entamoeba histolytica
- Cryptosporidium spp.
- Giardia duodenalis

 Sample Source : Stool

## BK-Q Real Time PCR Kit

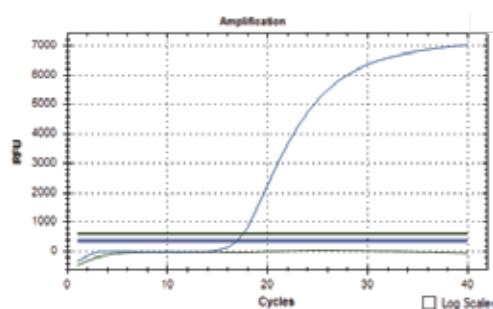
- BK polyomavirus (BK) is a compact DNA virus that can establish a lifelong infection in the renal tubular and uroepithelial cells of the global population.
- In most individuals, this infection remains dormant and harmless. Nonetheless, in people with weakened immune systems, BK virus can become active, potentially resulting in BKPyV-associated nephropathy.
- This kit enables in the detection of Polyomavirus BK virus specific Ag/VP2 gene in clinical samples.



BK-Q Real Time PCR specific amplification plot of BK positive sample (FAM channel) along with internal control (HEX channel).

## H. Pylori-Q Real-Time PCR Kit

- Helicobacter pylori (H. pylori) is a bacterium known for infecting the stomach and potentially leading to the development of ulcers and inflammation in the stomach lining or the upper section of the small intestine, known as the duodenum.
- Many cases of peptic ulcers, gastritis, and duodenitis are caused by H. pylori infection and in certain cases, this infection may even elevate the risk of stomach cancer.
- The kit is designed for specific identification of Helicobacter pylori in human stool and tissue samples from patients with signs and symptoms of Helicobacter pylori infection.
- Targets covered: Ure C & Cag A genes.



H. Pylori-Q Real Time PCR specific amplification plot of H. Pylori positive sample (FAM channel) along with internal control (HEX channel).

## VZV-Q Real Time PCR Kit

- Chickenpox, or varicella, is a contagious disease caused by the varicella-zoster virus (VZV), a DNA virus belonging to the herpesvirus family.
- Mpox is a viral infection caused by the Monkeypox virus, which belongs to the Orthopoxvirus genus. The virus is divided into two main clades: Clade I (which includes subclades Ia and Ib) and Clade II (which includes subclades IIa and IIb).
- Both VZV and Mpox share overlapping clinical symptoms such as rash, fever, and systemic involvement. Combining the detection of these two viruses allows for more accurate differential diagnosis, especially in areas where both infections are circulating.
- VZV-Q Real time PCR kit detects and differentiates between Monkeypox virus Clade I and II and Varicella-Zoster Virus specific genes.

Targets covered: Mpox clade I, Mpox Clade II, VZV

Sample Source: Lesion swabs and tissue

## Nipah-Q Real Time PCR Kit

- The Nipah virus (NiV) is a zoonotic virus, capable of transmitting between animals and humans. In nature, fruit bats, often referred to as flying foxes, serve as the primary reservoir for NiV.
- This virus is known to infect both pigs and humans, leading to conditions such as encephalitis (inflammation of the brain) and can result in a range of mild to severe illnesses, sometimes proving fatal.
- This kit enables detection of RNA from Nipah virus in.

Targets covered: NiV specific Nucleocapsid protein gene.

Sample Source: Throat and nasal swab.

## EBV-Q Real Time PCR Kit

- Epstein-Barr virus (EBV), or human herpesvirus 4, is a widely prevalent member of the herpes virus family. It infects most people globally through saliva, causing conditions like infectious mononucleosis, commonly known as mono.
- Symptoms of EBV infection can include fatigue, fever, inflamed throat, swollen lymph nodes in the neck, enlarged spleen, swollen liver and rash.

Targets covered: EBV 1 & 2 specific LMP-2A gene.

Sample Source: Human blood.

## Human Parvovirus-Q Real Time PCR Kit

- Human parvovirus, known as B19, differs from the parvovirus found in dogs and cats. Parvovirus B19 is a common infectious disease that spreads from person to person, usually causing mild or no symptoms.
- In some cases, it affects cells that develop into red blood cells, temporarily halting their production, which is noticeable in individuals with abnormal red blood cell production.

Targets covered: Human Parvovirus (B19) specific NS1 gene.

Sample Source: Blood, Serum, Plasma

## C. Albicans-Q Real Time PCR Kit

- Candidiasis is a fungal infection triggered by the yeast Candida, with Candida albicans being the most prevalent culprit. Candida typically resides on and within the body, including areas like the skin, mouth, throat, gut, and vagina, causing no issues.
- In extreme cases infections can occur if Candida over grows or penetrates deep into the body, leading to conditions such as bloodstream or internal organ infections like the kidney, heart, or brain.

 **Targets covered:** Small subunit ribosomal RNA (SSU rRNA) gene.

 **Sample Source:** Blood, Genital, Swabs & Fluids

## SS-Q Real Time PCR Kit

- Salmonella and Shigella rank as the second and third leading culprits of bacterial food-related illnesses in the world, contributing significantly to global health challenges.
- Controlling and managing diseases caused by these microbes is made difficult by the rise of drug-resistant varieties and the absence of a viable vaccine.
- Our SS-Q kit provides rapid and accurate detection of Salmonella & Shigella in stool samples.

 **Targets covered:** Salmonella specific fimA gene & Shigella specific dnaA gene.

 **Sample Source:** Stool.

## Rota-Q Real Time PCR Kit

- Rotavirus is a highly contagious virus that leads to diarrhea and intestinal issues, primarily affecting infants and young children worldwide.
- It results in stomach and intestinal inflammation, leading to severe symptoms like diarrhea, vomiting, fever, abdominal pain, and dehydration in affected individuals, including some adults.

 **Targets covered:** Rotavirus specific mgpB gene.

 **Sample Source:** Stool.

## EEC-Q Real Time PCR Kit

- Enteroviruses is a family of viruses responsible for a range of infections, typically result in mild symptoms akin to the common cold. However, in certain instances, particularly among young children or individuals with weakened immune systems, severe complications can emerge.

 **Pathogenes covered:** Enterovirus specific - 5'UTR gene, Enterovirus 71 specific - polyprotein gene and Coxsackie Virus A16 specific - polyprotein gene.

 **Sample Source:** clinical samples including nasal and pharyngeal secretions.

## CMV-Q Real Time PCR Kit

- Cytomegalovirus causes serious infections to various body parts and growth problems to new born babies.
- People with weakened immune systems who get CMV can have more serious symptoms affecting the eyes, lungs, liver, esophagus, stomach, and intestines.
- Qualitative/ Quantitative detection of specific target using Taqman chemistry on Real Time PCR.



**Targets Covered :** RL1, IE1 & PP65 genes



**Sample Source :** Blood

## Rubella-Q Real Time PCR Kit

- Rubella is a contagious viral infection that causes rashes, fever & sore throat; mostly affecting children & young adults
- If a pregnant woman becomes infected with rubella, it can lead to a miscarriage or cause severe birth defects in the developing fetus."
- Our kit enables detection of Rubella non-structural polyprotein p200 gene in clinical samples.



**Targets Covered :** polyprotein p200.



**Sample Source :** Nasopharyngeal, Oropharyngeal & Throat Swab

Commercial Name	Cat No.	Pack Size	Compatible Instruments
Sepsis-Q Real Time PCR Kit	G2M804026	25 T	Instruments with FAM, ROX, Cy5, HEX/VIC Channels including RAPIcycler - 96, ABI Prism®7500 & Quantstudio, BioRad CFX96, Roche Lightcycler, Qiagen Rotor-Gene, etc.
Anti Microbial Resistance/AMR (MDR-Q Real Time PCR Kit)	G2M707521	50 T	
MCP-Q Comprehensive Real Time PCR Kit	G2M803821	25 T	
GCP-Q Comprehensive Real Time PCR Kit	G2M803621	25 T	
BK-Q Real Time PCR Kit	G2M705421	50 T	
H. Pylori-Q Real-Time PCR Kit	G2M706321	50 T	
EBV-Q Real Time PCR Kit	G2M705621	50 T	
Nipah-Q Real Time PCR Kit	G2M705921	50 T	
VZV-Q Real Time PCR Kit	G2M705821	50 T	
Human Parvovirus-Q Real Time PCR Kit	G2M706521	50 T	
C. Albicans-Q Real Time PCR Kit	G2M708021	50 T	
SS-Q Real Time PCR Kit	G2M801721	50 T	
Rota-Q Real Time PCR Kit	G2M801621	50 T	
EEC-Q Real Time PCR Kit	G2M801321	50 T	
CMV-Q Real Time PCR Kit*	G2M709521	50 T	
Rubella-Q Real Time PCR Kit*	G2M804023	50 T	

\*RUO only

# Analyzing *Complex* Rare Diseases





# Blood Borne Infectious Diseases

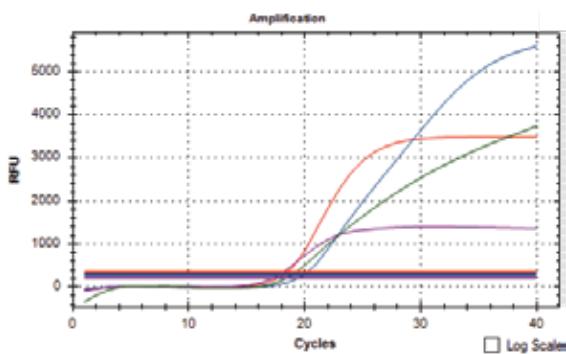
Occupational exposure to blood and other bodily fluids is a risk in various professions. Healthcare professionals, emergency responders, public safety personnel, and others may encounter blood through incidents like needlestick injuries, mucous membrane contact, and skin exposure.

The key bloodborne pathogens of concern are human immunodeficiency virus (HIV), hepatitis B virus (HBV), and hepatitis C virus (HCV). To minimize the risk of exposure to blood and bodily fluids, both employees and employers should make use of available equipment that eliminates the need for needles and sharps and adopt safe work practices.

## 3Hdte-Q

- Multiplex Real Time PCR Kit.
- Simultaneous detection of Hepatitis B, Hepatitis C & HIV viruses.

 Targets covered: • HCV Specific: Poly Gene  
• HBV Specific: CR Gene • HIV Specific: poL gag Genes

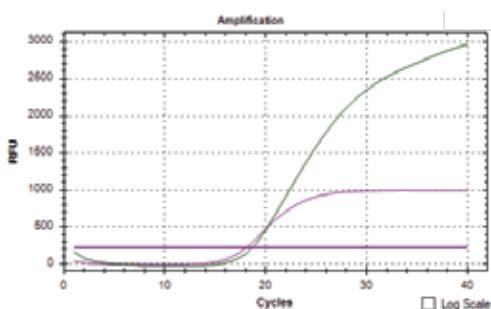


3Hdte-Q Real Time PCR specific amplification plot of positive sample for HCV (FAM channel), HIV (HEX channel) and HBV (Texas Red channel) along with internal control (Cy5 channel).

## HIV-Q Real Time PCR Kit

- HIV (human immunodeficiency virus) is a virus that attacks the body's immune system. If HIV is not treated, it can lead to AIDS (acquired immunodeficiency syndrome). There is currently no effective cure. Once people get HIV, they have it for life.
- HIV infection causes acute retroviral syndrome in human or host cells, since virus uses the host cell's machinery to convert the viral RNA into DNA and replicate itself.
- Allows Qualitative/ Quantitative detection of HIV poL, gag genes using Taqman chemistry on Real Time PCR based method.

Targets covered: HIV poL, gag genes.

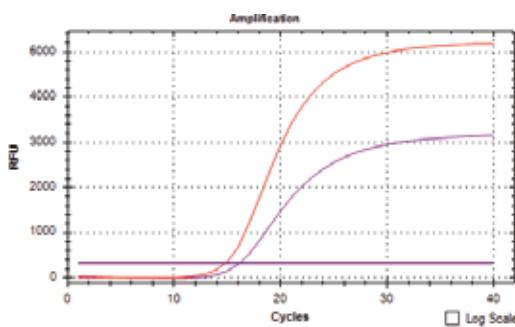


HIV-Q Real Time PCR specific amplification plot of positive sample for HIV (HEX channel) along with internal control (Cy5 channel).

## HBV-Q Real Time PCR Kit

- Hepatitis B is a vaccine-preventable liver infection caused by the hepatitis B virus (HBV). Hepatitis B is spread when blood, semen, or other body fluids from a person infected with the virus enters the body of someone who is not infected.
- This can happen through sexual contact; sharing needles, syringes, or other drug-injection equipment; or during pregnancy or delivery.
- Hepatitis B viral infection attacks liver and have potential for acute and chronic life-threatening liver infections, failure or death.
- Qualitative/ Quantitative detection kit for identification of the specific CR gene target DNA using fluorescent labeled primers and probes.

 Targets covered: • CR Gene



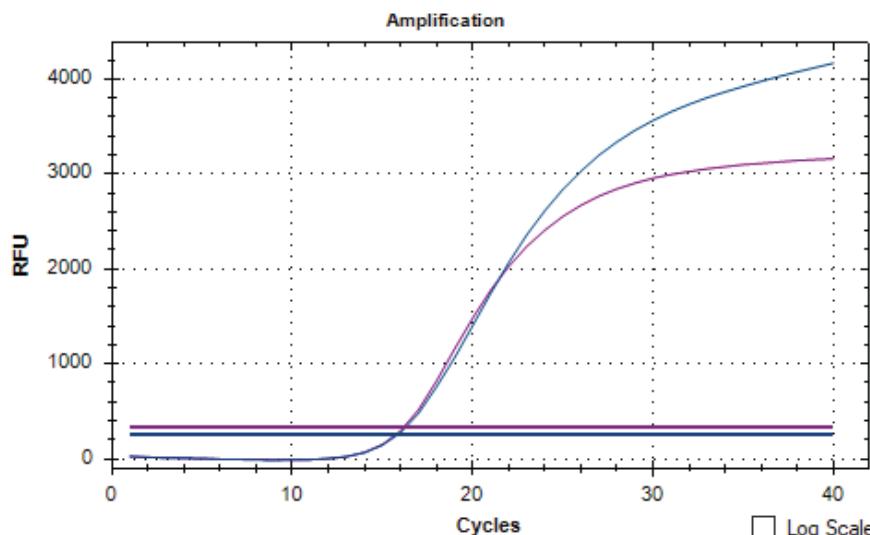
HBV-Q Real Time PCR specific amplification plot of positive sample for HBV (Texas Red) along with internal control (Cy5 channel).

## HCV-Q Real Time PCR Kit

- Hepatitis C is a liver infection caused by the hepatitis C virus (HCV). Hepatitis C is spread through contact with blood from an infected person.
- Today, most people become infected with the hepatitis C virus by sharing needles or other equipment used to prepare and inject drugs.
- Hepatitis C viral infection causes both acute and chronic hepatitis, ranging in severity from a mild illness to a serious, lifelong illness including liver cirrhosis and cancer.
- Qualitative/ Quantitative detection of target specific HCV Poly gene in clinical samples using Real Time PCR.



**Target covered:** HCV Poly gene



HCV-Q Real Time PCR specific amplification plot of positive sample for HCV (FAM channel) along with internal control (Cy5 channel).

## Ordering Information

Commercial Name	Cat No.	Pack Size	Compatible Instruments
3H-Q Real Time PCR Kit*	G2MBR4-0666	50 T	Instruments with FAM, ROX/Texas Red, Cy5, HEX/VIC Channels including Genes2Me's RapiCycler 96, ABI Prism®7500 & Quantstudio, BioRad CFX96, Roche Lightcycler, Qiagen Rotor-Gene.
HIV-Q Real Time PCR Kit*	G2MBR4-0077	50 T	
HBV-Q Real Time PCR Kit*	G2MBR4-0006	50 T	
HCV-Q Real Time PCR Kit*	G2MBR4-0076	50 T	

\*RNU only

# Analyzing *Complex* Rare Diseases



- Para-Q Multiplex Real Time PCR Kit
  - Para2-Q Real Time PCR Kit
- Chikungunya-Q Real Time PCR Kit
  - Zika Real Time PCR Kit
  - DENGUE-Q Real Time PCR Kit
- J.encephalitis -Q Real Time PCR Kit
  - Y. Fever-Q Real Time PCR Kit
  - W. Nile-Q Real Time PCR Kit
  - Malaria-Q Real Time PCR Kit





# Vector Borne Transmission Diseases

Vector-borne diseases (VBDs) are transmitted by vector arthropods such as mosquitoes, blackflies, sand flies, and bedbugs which cause infectious diseases affecting millions of people every year. Vector-borne diseases have a wide range of impacts on our health including fever, fatigue, body aches, and rashes. In more severe cases, they can lead to complications like organ damage, neurological issues, or even death. Therefore, to monitor disease spread and provide effective treatment. RT-PCR based diagnostic kits allow accurate and rapid diagnosis of diseases at an early stage.

By amplifying and analyzing specific target genes which help in the identification of the genetic material and disease-causing pathogens in samples like blood or tissue.

## Para-Q Multiplex Real Time PCR Kit

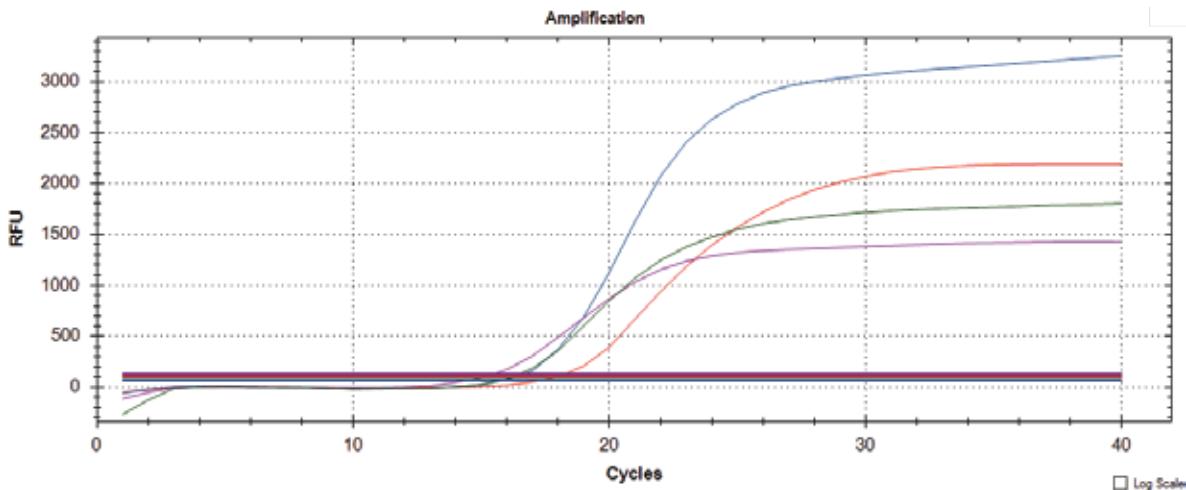
- Differential diagnosis in a single test.
- Multiplex kit with coverage of targets specific to Dengue, Malaria & Chikungunya along with Internal Control.

 **Target Pathogens:** Dengue, Malaria & Chikungunya.

## Para2-Q Real Time PCR Kit

- Tropical Diseases Fever Panel.
- Febrile infections that are prevalent in or unique to tropical and subtropical regions are collectively known as tropical fevers. They are caused by a number of viruses, bacteria, and protozoa and often get transmitted by an insect bite.
- Tropical diseases can be transmitted through physical contact, by airborne routes, or through sexual contact.
- Many are spread via contaminated food and water sources.
- Identification & differentiation of various vector borne transmission diseases.

 **Target Pathogens:** Dengue, Chikungunya, Zika, Y. Fever, W. Nile & J. Encephalitis.



Para2-Q Real Time PCR specific amplification plot of positive sample for Dengue (FAM channel), Chikungunya (Texas Red channel), Zika (Cy5 channel) along with internal control (HEX channel).

## Chikungunya-Q Real Time PCR Kit

- This test is a rapid method to detect the presence of the Chikungunya virus in the blood.
- The Chikungunya-Q RT PCR can also be used to monitor treatment for the disease & measure the effects of medication.

 **Target covered:** polyprotein gene

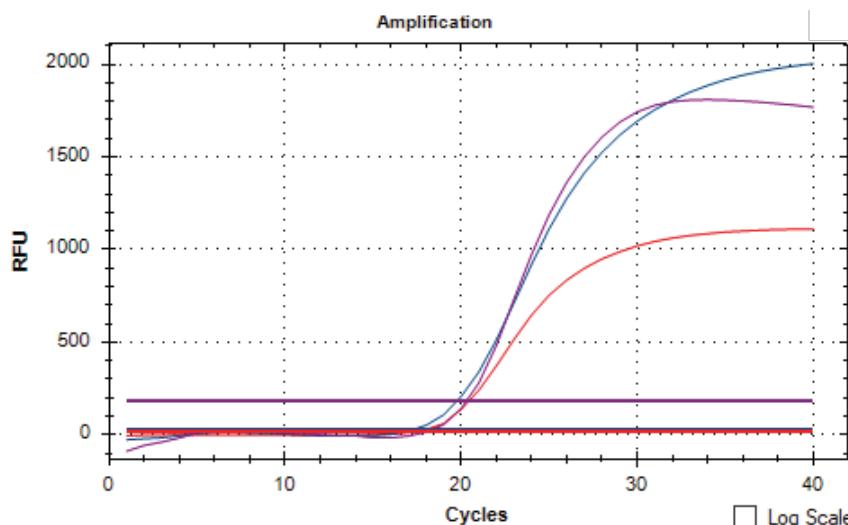
## Zika-Q Real Time PCR Kit

- Zika virus is mainly spread by the bite of an infected mosquito, though other routes of infection are possible.
- Zika virus infection can be detected through a blood test.
- Multiplex real- time PCR kit with specific primers and fluorescent probes targeting Zika Virus specific genes.
- One step detection using RNA as template, thus rapid and extremely accurate.

## Dengue-Q Real Time PCR Kit

- Dengue fever is caused by the dengue virus, transmitted to humans through the bite of infected mosquitoes, specifically the Aedes aegypti mosquito.
- Four dengue virus strains (DENV-1 to DENV-4) can cause dengue fever.
- People with dengue fever may have no symptoms or experience high fever, headache, muscle and joint pain, nausea, vomiting, and small red or bleeding spots on the skin.
- This kit is designed for the diagnosis of dengue virus in clinical samples with coverage of 4 DENV serotypes DENV 1, 2, 3, 4 along with Internal control.

 Targets covered : DENV1-subgenomic flavivirus RNA (sfRNA1), DENV2, 3, 4- subgenomic flavivirus RNA (sfRNA2).



Dengue-Q Real Time PCR specific amplification plot of positive sample for dengue (FAM and Texas red channel) along with internal control (Cy5 channel).

## J. Encephalitis-Q Real Time PCR Kit

- Japanese encephalitis virus (JEV) is a flavivirus related to dengue, yellow fever and West Nile viruses, and is spread by mosquitoes.
- Detection of Japanese encephalitis in cerebrospinal fluid (CSF) & serum specimens from patients.

 Target Covered: Polyprotein gene.

## Y. Fever-Q Real Time PCR Kit

- Yellow fever is a viral disease that is transmitted to humans by the bites of infected mosquitoes. It is prone to epidemics and is preventable with a vaccine. These day-biting mosquitoes breed around houses (domestic), in forests or jungles (wild), or in both habitats (semi-domestic).
- Allergic rhinitis – commonly known as hay fever – is a group of symptoms affecting the nose.
- Detection of Yellow Fever Virus specific gene targets in patients with signs and symptoms of infection.

## W. Nile-Q Real Time PCR Kit

- West Nile Virus (WNV) belongs to the RNA virus family of Flaviviridae. It is known to spread primarily through arthropod vectors such as mosquitoes.
- The virus infects mainly birds but is also reported to infect humans as well as pets such as cats and dogs.
- Detection of West Nile Virus (WNV) specific polyprotein gene in clinical samples.



**Target Covered:** Polyprotein gene

## Malaria-Q Real Time PCR Kit

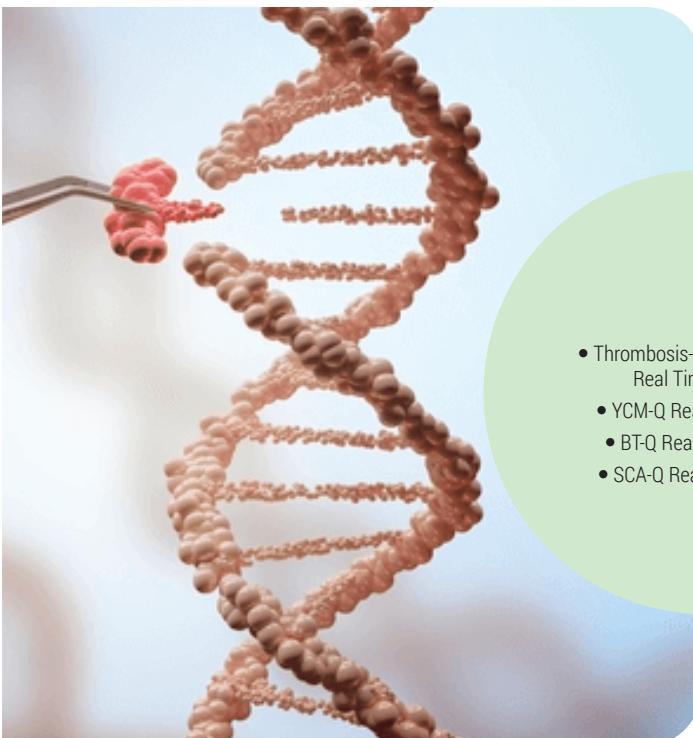
- Malaria is caused by parasites which are spread to humans through the bites of infected mosquitoes. People who have malaria usually feel very sick with a high fever and shaking chills.
- Kit enables detection of malarial parasite specific 18S SSU rRNA gene in blood, serum/plasma samples.



**Target Pathogens:** Plasmodium knowlesi, Plasmodium vivax, Plasmodium falciparum, Plasmodium ovale, Plasmodium malariae.

## Ordering Information

Commercial Name	Cat No.	Pack Size	Compatible Instruments
Para-Q Multiplex Real Time PCR Kit	G2M706121	50 T	Instruments with FAM, ROX/Texas Red, Cy5, HEX/VIC Channels including Genes2Me's RapiCybler 96, ABI Prism®7500 & Quantstudio, BioRad CFX96, Roche Lightcycler, Qiagen Rotor-Gene.
Para2-Q Real Time PCR Kit	G2M801521	50 T	
Chikungunya-Q Real Time PCR Kit	G2M705321	50 T	
Zika Real Time PCR Kit	G2M262621	50 T	
DENGUE-Q Real Time PCR Kit	G2M705021	50 T	
J.encephalitis -Q Real Time PCR Kit	G2M802021	50 T	
Y. Fever-Q Real Time PCR Kit	G2M801821	50 T	
W. Nile-Q Real Time PCR Kit	G2M802321	50 T	
Malaria-Q Real Time PCR Kit	G2M706221	50 T	



- Thrombosis-Q Comprehensive Real Time PCR Kit
- YCM-Q Real Time PCR Kit
- BT-Q Real Time PCR Kit
- SCA-Q Real Time PCR Kit



# Genetic Disorders

These kits are designed to detect different mutations associated with specific genetic disorders. These assays are compatible with commonly available Real-Time PCR instruments.

## Thrombosis-Q Real Time PCR Kit

- Thrombosis-Q Comprehensive Real Time PCR Kit is an in vitro diagnostic test for the detection of Thrombosis specific mutation in DNA extracted from human biological samples.

 **Mutations Covered:** Factor II mutation in the 3'UTR region of FII gene i.e. G20210A (Prothrombin mutation/a change of guanine to adenine) and Factor V Leiden mutations i.e. G1691A mutation, MTHFR C677T mutation and MTHFR A1298C mutation.

## YCM-Q Real Time PCR Kit (Y Chromosome Micro deletion)

- YCM-Q Real Time PCR Kit for Y Chromosome Micro deletion is an in vitro diagnostic test for the detection of micro deletions in human Y chromosome DNA extracted from clinical samples.

 **Mutations Covered:** 14 micro deletions in human Y chromosome associated with male infertility.

## BT-Q Real Time PCR Kit (Beta Thalassemia)

- BT-Q Real Time PCR kit is an in vitro diagnostic test for the detection of Beta Thalassemia mutation in human DNA extracted from clinical samples.



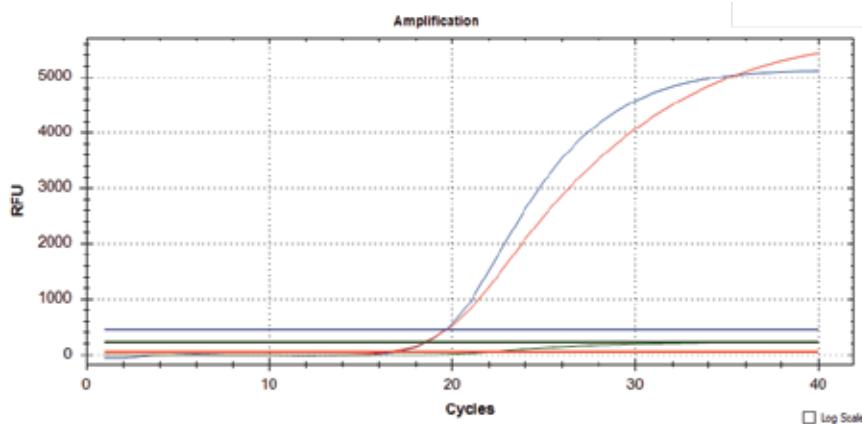
**Mutations Covered:** 7 mutations in the human beta globin gene associated with genetic risk.

## SCA-Q Real Time PCR Kit (Sickle Cell Anemia)

- SCA-Q Real Time PCR Kit is an in vitro diagnostic test for the detection of Sickle Cell Anemia mutation in human DNA extracted from clinical samples.
- Intends for detection of sickle cell anemia i.e. human beta globin GAG - GTG [Glu-Val] mutation in human DNA extracted from clinical samples.
- It contains reagents and enzymes for the specific amplification for the direct detection of the specific amplicon in FAM fluorescence channel.



**Mutations Covered:** GAG - GTG [Glu-Val] mutation.



SCA-Q Real Time PCR specific amplification plot of positive sample for SCA-Q (Texas red channel) along with internal control (Cy5 channel).

## Ordering Information

Commercial Name	Cat No.	Pack Size	Compatible Instruments
Thrombosis-Q Comprehensive Real Time PCR Kit	G2M803421	50 T	Instruments with FAM, ROX/Texas Red, Cy5, HEX/VIC Channels including Genes2Me's RapiCyycler 96, ABI Prism®7500 & Quantstudio, BioRad CFX96, Roche Lightcycler, Qiagen Rotor-Gene.
YCM-Q Real Time PCR Kit	G2M803021	50 T	
BT-Q Real Time PCR Kit	G2M803321	50 T	
SCA-Q Real Time PCR Kit	G2M803221	50 T	



# Nucleic Acid Extraction Solutions

- Extensive solution for various applications that ensure balance of high yield & reproducibility
- Delivers High Yield and Purity for Different Downstream Applications such as PCR, RT-PCR, Sequencing, NGS etc.



One for all Nucleic Acid  
Extraction Kit

Genes2Me "One for All" total Nucleic Acid Extraction solution is an automation friendly kit that enables processing of varied clinical samples for the isolation of pure & intact nucleic acids.

## Sample Types



- Whole Blood
- Saliva
- Nasopharyngeal/  
Oropharyngeal Swabs
- Vaginal & Cervical Swabs
- Plasma/ Serum
- Urine
- Fresh Tissue
- Other Body Fluids

- 🕒 One Unique Solution for total Nucleic Acid Extraction.
- 🕒 Ready to use Prefilled Plate Format.
- 🌡 Room Temperature Optimized Protocols.
- 🕒 High Quality Purified Nucleic Acid (DNA/ RNA) suitable for downstream applications.
- 🕒 Flexible to Multiple Samples Types.
- 🕒 Processing Time ~15 minutes.

# RAPI-X 16

Fast & Automated Nucleic Acid Extraction System for 8/16 Samples



# RAPI-X 96

Fast & Automated Nucleic Acid Extraction System for 96 Samples

Genes2Me Rapi-X16 nucleic acid extraction system features high sensitivity with precise mechanical movement. The system ensures homogenous suspension and distribution of magnetic beads, leading to higher DNA/ RNA yields.

- Suitable for Extraction & Purification of various clinical samples.
- Complete range of kit reagents for faster & efficient extraction and purification of DNA, RNA and Total nucleic acids.
- Temperature uniformity & accurate controls.
- High Recovery Rate of Magnetic Beads >98%.
- User friendly Interface for real time display of running programs.
- HEPA filter and UV Light for decontamination.
- Powerful application to efficiently meet different reagent requirements.

- **High Throughput** : 96 samples can be extracted within 15-30 mins based on kit & application.
- **Light Weight** : Saves laboratory space.
- **10 inch Large Display** : Simple interface & easy operation.
- **Open Platform** for all other available automation friendly magnetic bead based kits.



### **BLOOD DNA Extraction Kit**

- Purification of genomic DNA from fresh whole blood/ blood stabilized with anticoagulants.
- Unique buffer system for efficient RBC lyses and simultaneous recovery of WBCs by centrifugation.

### **Viral RNA Extraction Kit**

- Available in both Pre-filled Ready-to Use Format and Bulk Packs.
- Carrier RNA included to enhance quality of eluted viral RNA.
- Recovery of  $\geq 95\%$  viral RNA.

### **Bacterial DNA/RNA Extraction Kit**

- Allows isolation of gDNA/RNA from both gram negative and gram positive cultures.
- Can process samples using silica membrane based spin column/ magnetic beads technology.



### **FORENSIC DNA Extraction Kit**

- Isolate genomic DNA from cultured cells as well as various tissue types.
- Can process sample using silica membrane based spin column/ magnetic beads technology.

### Fecal DNA Extraction Kit

- Isolate pure genomic DNA from fresh or frozen stool or feces samples.
- Can process sample using silica membrane based spin column/ magnetic beads technology.

### Cell free DNA Extraction Kit

- Allows the isolation of cell-free DNA from either fresh or frozen plasma/serum samples.
- Enables efficient purification of circulating nucleic acids from human plasma, serum, or urine.

### SALIVA DNA Extraction Kit

- Isolation of genomic DNA from Human saliva samples and swabs.
- Can process sample using silica membrane based spin column/ magnetic beads technology.

### DBS DNA Extraction Kit

- Isolation of genomic DNA from dried blood spots.
- Can process sample using silica membrane based spin column/ magnetic beads technology.

### FFPE DNA Extraction Kit

- Designed for the purification of genomic DNA from formalin- fixed paraffin-embedded (FFPE) tissue sections.
- Enables the partial reversing of the modification caused by formalin which results in high yield with good quality.



### TISSUE & BODY FLUID DNA Extraction Kit

- Optimized solution for cell/ tissue lyses & purification of intact genomic DNA from broad range of biological samples.
- Can process sample using silica membrane based spin column/ magnetic beads technology.



## Nucleic Acid Extraction Solutions

Cat No.	Commercial Name	Qty
G2M18001	RapiX-96	1
G2M18002	RapiX-16	1
G2M030620	MagRNA-II Viral RNA Extraction Kit	960 Tests
G2M030320	MagRNA-II Viral RNA Extraction Kit	200 Tests
G2M030420	MagRNA-II Viral RNA Extraction Kit	500 Tests
G2M030520-PF(KF)	MagRNA-II Viral RNA Extraction Kit	480 Tests
G2M030520-PF(MG)	MagRNA-II Viral RNA Extraction Kit	480 Tests
G2M030520-PF(R96)	MagRNA-II Viral RNA Extraction Kit	480 Tests
G2M030520-PF(R16)	MagRNA-II Viral RNA Extraction Kit	192 Tests
G2M030520-PF(R8)	MagRNA-II Viral RNA Extraction Kit	96 Tests
G2M080820	SpinRNA Viral RNA Extraction Kit	250 Tests
G2M181820	SpiNXT Blood DNA Extraction kit	50 Preps,
G2M181720	SpiNXT Blood DNA Extraction kit	250 Preps
G2M373721	SpiNXT Blood RNA Extraction kit	50 Preps,
G2M373831	SpiNXT Blood RNA Extraction kit	250 Preps
G2M242421	SpiNXT Forensic DNA Extraction kit	50 Preps,
G2M242521	SpiNXT Forensic DNA Extraction kit	250 Preps
G2M131420	SpiNXT Tissue & body Fluids DNA Extraction kit	50 Preps,
G2M131320	SpiNXT Tissue & body Fluids DNA Extraction kit	250 Preps
G2M131420-CF	SpiNXT Tissue & body Fluids DNA Extraction kit	50 Preps,
G2M131320-CF	SpiNXT Tissue & body Fluids DNA Extraction kit	250 Preps
G2M131420-NAE	SpiNXT Tissue & body Fluids DNA Extraction kit	50 Preps
G2M131320-NAE	SpiNXT Tissue & body Fluids DNA Extraction kit	250 Preps
G2M232421	SpiNXT DBS DNA Extraction kit (Dried Blood Spot)	50 Preps
G2M232321	SpiNXT DBS DNA Extraction kit (Dried Blood Spot)	250 Preps
G2M171721	SpiNXT Saliva DNA Extraction Kit	50 Preps
G2M171821	SpiNXT Saliva DNA Extraction Kit	250 Preps
G2M181921	MagNXT Blood DNA extraction kit	50 Tests;
G2M182021	MagNXT Blood DNA extraction kit	200 Tests
G2M182121	MagNXT Blood DNA extraction kit	500 Tests
G2M182121-PF(KF)	MagNXT Blood DNA extraction kit	480 Tests
G2M182121-PF(MG)	MagNXT Blood DNA extraction kit	480 Tests
G2M182121-PF(R96)	MagNXT Blood DNA extraction kit	480 Tests
G2M182121-PF(R16)	MagNXT Blood DNA extraction kit	192 Tests
G2M182121-PF(R8)	MagNXT Blood DNA extraction kit	96 Tests
G2M242021	MagNXT forensic DNA extraction kit	50 Preps
G2M241921	MagNXT forensic DNA extraction kit	250 Preps
G2M212121	MagNXT Tissue & body fluids DNA extraction kit	50 Preps
G2M212021	MagNXT Tissue & body fluids DNA extraction kit	250 Preps



## Nucleic Acid Extraction Solutions

Cat No.	Commercial Name	Qty
G2M211921	MagNXT Tissue & body fluids DNA extraction kit	500 Preps
G2M211921-PF(KF)	MagNXT Tissue & body fluids DNA extraction kit	480 Preps
G2M211921-PF(MG)	MagNXT Tissue & body fluids DNA extraction kit	480 Preps
G2M211921-PF(R96)	MagNXT Tissue & body fluids DNA extraction kit	480 Preps
G2M211921-PF(R16)	MagNXT Tissue & body fluids DNA extraction kit	192 Preps
G2M211921-PF(R8)	MagNXT Tissue & body fluids DNA extraction kit	96 Preps
G2M212121-CF	MagNXT Tissue & body fluids DNA extraction kit	50 Preps
G2M212021-CF	MagNXT Tissue & body fluids DNA extraction kit	250 Preps,
G2M211921-CF(PF)R96	MagNXT Tissue & body fluids DNA extraction kit	480 Preps
G2M211921-CF(PF)R16	MagNXT Tissue & body fluids DNA extraction kit	192 Preps
G2M211921-CF(PF)R8	MagNXT Tissue & body fluids DNA extraction kit	96 Preps
G2M212121-NAE	MagNXT Tissue & body fluids DNA extraction kit	50 Preps
G2M212021-NAE	MagNXT Tissue & body fluids DNA extraction kit	250 Preps,
G2M211921-NAE(PF)KF	MagNXT Tissue & body fluids DNA extraction kit	480 Preps
G2M211921-NAE(PF)MG	MagNXT Tissue & body fluids DNA extraction kit	480 Preps
G2M211921-NAE(PF)R96	MagNXT Tissue & body fluids DNA extraction kit	480 Preps
G2M211921-NAE(PF)R16	MagNXT Tissue & body fluids DNA extraction kit	192 Preps
G2M211921-NAE(PF)R8	MagNXT Tissue & body fluids DNA extraction kit	96 Preps
G2M271921	MagNXT DBS DNA Extraction kit	50 Preps
G2M272021	MagNXT DBS DNA Extraction kit	250 Preps
G2M191821	MagNXT Saliva DNA Isolation Kit	50 Preps
G2M191921	MagNXT Saliva DNA Isolation Kit	250 Preps
G2M191921-PF(KF)	MagNXT Saliva DNA Isolation Kit	480 Preps
G2M191921-PF(MG)	MagNXT Saliva DNA Isolation Kit	480 Preps
G2M191921-PF(R96)	MagNXT Saliva DNA Isolation Kit	480 Preps
G2M191921-PF(R16)	MagNXT Saliva DNA Isolation Kit	192 Preps
G2M191921-PF(R8)	MagNXT Saliva DNA Isolation Kit	96 Preps
G2M141421	SpiNXT Bacterial DNA Extraction Kit	50 Tests
G2M141521	SpiNXT Bacterial DNA Extraction Kit	250 Tests
G2M121220	SpiNXT Bacterial RNA Extraction Kit	50 Tests
G2M121320	SpiNXT Bacterial RNA Extraction Kit	250 Tests
G2M343421	MagNXT Bacterial DNA Extraction Kit	50 Tests
G2M343521	MagNXT Bacterial DNA Extraction Kit	250 Tests
G2M282821	MagNXT Bacterial RNA Extraction Kit	50 Tests
G2M282921	MagNXT Bacterial RNA Extraction Kit	250 Tests
G2M323421	SpiNXT Fecal DNA Extraction Kit	50 Tests;
G2M323521	SpiNXT Fecal DNA Extraction Kit	250 Tests
G2M232121	SpiNXT FFPE DNA Extraction Kit	50 Tests;
G2M232221	SpiNXT FFPE DNA Extraction Kit	250 Tests