



RT-PCR RESEARCH SOLUTIONS

*Analyzing Complex
Rare Diseases*


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

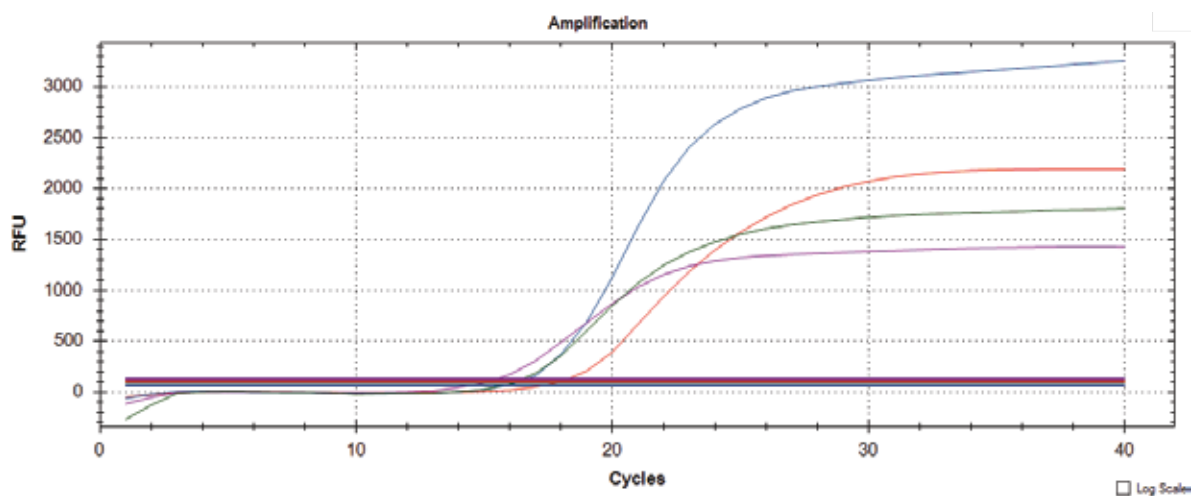
- Differential diagnosis in a single test.
- Multiplex kit with coverage of targets specific to Dengue, Malaria & Chikungunya along with Internal Control.

 **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

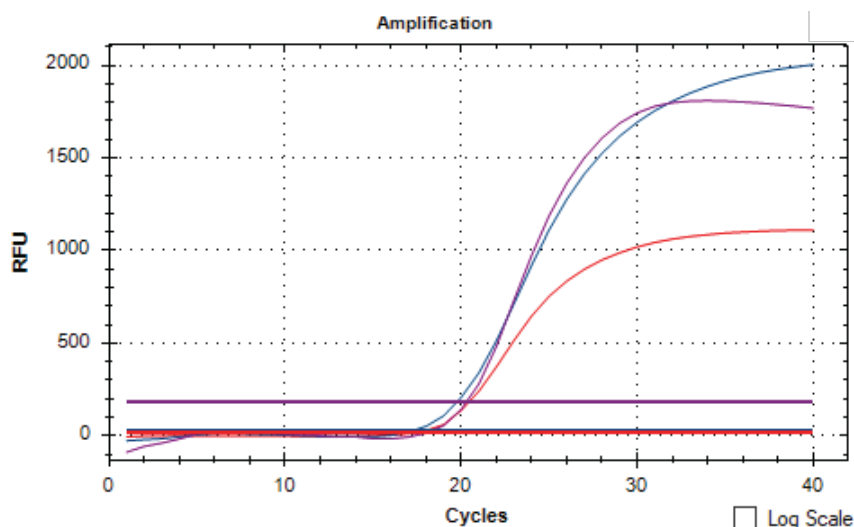
Zika-Q Real Time PCR Kit

- 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 or urine 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

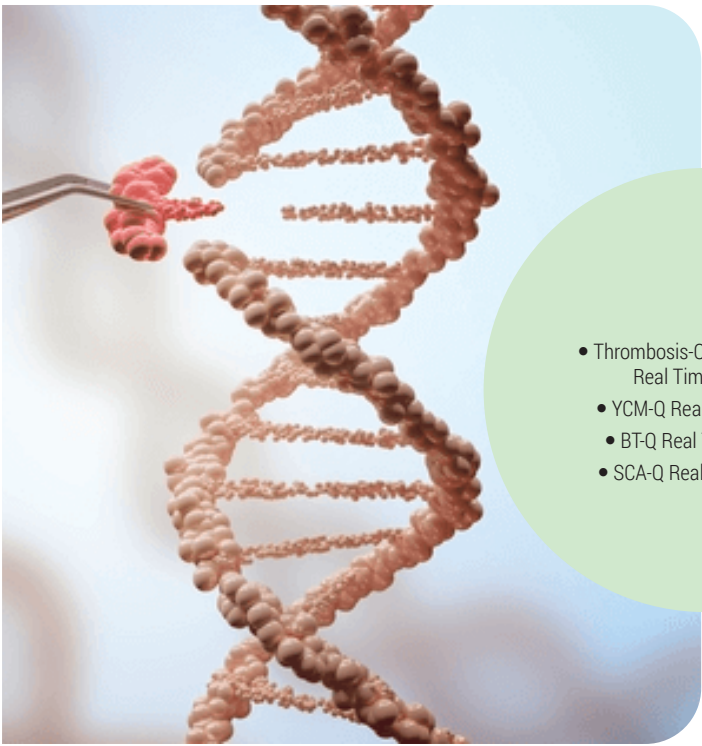
Malaria-Q Real Time PCR Kit

- 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 RapiCycler 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)

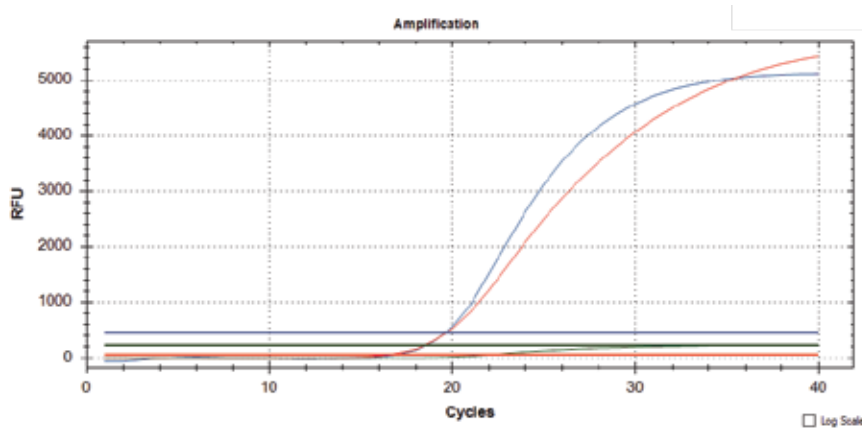
- BT-Q Real Time PCR kit is an in vitro diagnostic test for the detection of Beta Thalassemia mutation in human DNA extracted from clinical samples.

Mutations Covered: 7 somatic mutations in 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 RapiCyler 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	