

Emerging
&
tropical
diseases



Real-time efficiency in detecting emerging and tropical pathogens

RealStar® emerging and tropical disease testing panel

Emerging and tropical infectious diseases are becoming an increasingly important issue, not only in tropic and sub-tropic regions, but also in temperate zones. Worldwide travel activities and climate change contribute to changes in the geographical distribution of tropical viruses and pathogens, as well as their transmission vectors. Reliable diagnosis is a key factor for patient management but also for surveillance, prevention and preparedness.

A special focus of altona Diagnostics is on the development, validation and commercialization of real-time (RT-)PCR assays for the detection of emerging and tropical viruses and pathogens. altona Diagnostics was the first company which made reliable molecular diagnostic test kits commercially available during outbreak situations for Influenza A (H1N1) pdm09, Chikungunya virus, MERS-Coronavirus, Ebolavirus, Lassa virus, Zika virus and Yellow fever virus.

RealStar® kits are CE-IVD marked tests, based on real-time (RT-)PCR technology, utilizing polymerase chain reaction (PCR) for the amplification of specified target sequences, as well as target-specific probes for detecting amplified DNA or RNA.

The clinical symptoms of many tropical infectious diseases are often unspecific and alike. Therefore, the RealStar® emerging and tropical disease testing panel facilitates the differential detection of tropical viruses, parasites and emerging pathogens. Additional kits are developed for species differentiation or typing.

Key advantages: the RealStar® (RT-)PCR kits are individual target specific assays optimized for highest sensitivity, specificity and best performance.

The RealStar® emerging and tropical disease testing panel allows the parallel detection of different viruses and pathogens in a single run – due to the use of one universal Internal Control and the harmonized (RT-)PCR temperature profile for DNA respectively RNA targets.

In addition, the composition of the RealStar® emerging and tropical disease testing panel facilitates a flexible combination of the assays which makes it a powerful differential diagnosis tool.

Product name	Detection of	Rxns	Order no.
Emerging and tropical viruses and parasites			
RealStar® CCHFV RT-PCR Kit 1.0	Crimean-Congo hemorrhagic fever virus	96	181013
RealStar® Chagas PCR Kit 1.0	<i>Trypanosoma cruzi</i>	96	611013
RealStar® Chikungunya RT-PCR Kit 2.0	Chikungunya virus	96	012013
RealStar® Dengue RT-PCR Kit 3.0	Dengue virus	96	283013
RealStar® Filovirus Screen RT-PCR Kit 1.0	Human pathogenic filovirus species	96	441013
RealStar® Lassa Virus RT-PCR Kit 2.0	Lassa virus	2×48	642013
RealStar® MERS-CoV RT-PCR Kit 1.0	Middle East respiratory syndrome coronavirus	48	391012
RealStar® RVFV RT-PCR Kit 1.0	Rift Valley fever virus	96	541013
RealStar® WNV RT-PCR Kit 2.0	West Nile virus	96	322013
RealStar® Yellow Fever Virus RT-PCR Kit 1.0	Yellow fever virus	96	671013
RealStar® Zika Virus RT-PCR Kit 1.0	Zika virus	96	591013
RealStar® Malaria PCR Kit 1.0	Human pathogenic <i>Plasmodium</i> species	96	341013
RealStar® Malaria S & T PCR Kit 1.0*	<i>Plasmodium</i> and species differentiation	2×48	351013

The RealStar® (RT-)PCR assays are CE-IVD marked diagnostic kits according to the European *in vitro* diagnostic directive 98/79/EC.

The RealStar® Zika Virus RT-PCR Kit 1.0 and the RealStar® Filovirus Screen RT-PCR Kit 1.0 have been listed by WHO as first *in vitro* diagnostic test eligible for procurement agencies and member states. Moreover, various RealStar® (RT-)PCR kits of the emerging and tropical disease testing panel received approval in several Latin American as well as Asian countries, such as Brazil, Mexico and South Korea, respectively.

Due to their sensitive, specific and reliable performance and their ease of use, real-time (RT-)PCR assays of the RealStar® emerging and tropical disease testing panel are widely used in a large variety of laboratories, including many reference laboratories for emerging and tropical infectious diseases, worldwide.

Products not FDA cleared or approved.

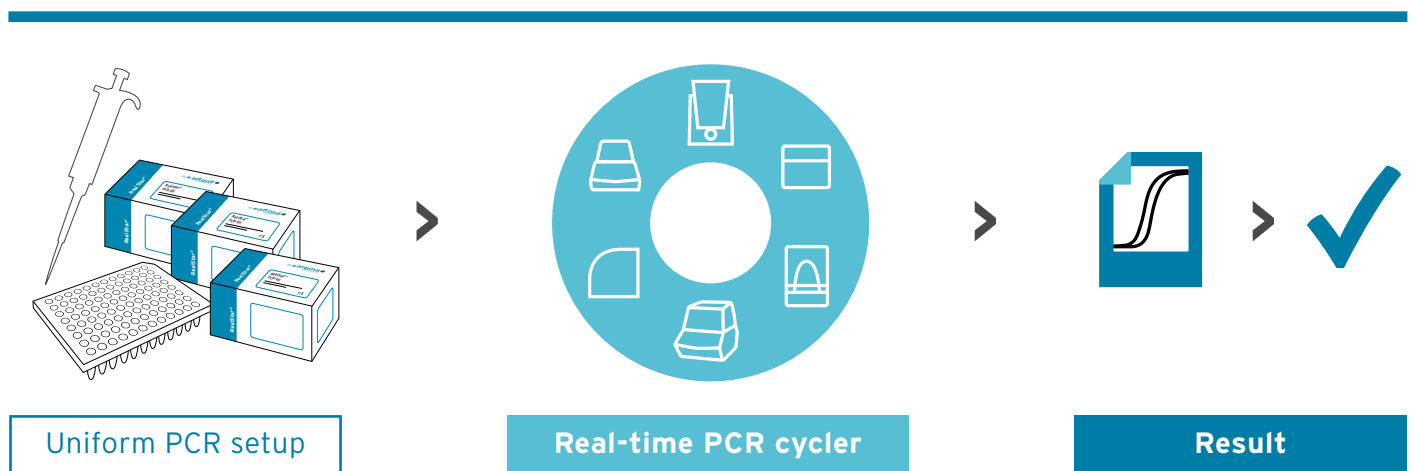
Kits not available in all countries.

* Product licensed with Health Canada.

Features of the RealStar® real-time (RT-)PCR kits

- Ready to use kits
- All assay components necessary for real-time (RT-)PCR analysis comprised
 - Internal Control included
- Performance
- Each assay developed and optimized individually for best performance, robustness and reliability
 - Verified high level sensitivity and specificity
- Parallel testing
- Detection of various pathogens in one run possible: Chikungunya virus, Dengue virus, Lassa virus, Rift Valley fever virus, Yellow fever virus and Zika virus
- Flexibility
- Fast response time to emerging pathogens or genotypes
 - Combination of assays according to demand
- Differentiation
- of the *Plasmodium* species *P. falciparum*, *P. malariae*, *P. ovale*, *P. vivax*, and *P. knowlesi*
- Quality assured
- CE-IVD (*in vitro* diagnostic)
 - Regular participation in international proficiency panel programs

The RealStar® emerging and tropical disease testing panel offers a comprehensive list of assays for the detection of tropical and emerging pathogens. All assays are developed and validated to be used on a wide range of real-time PCR cyclers.



Supported cyclers: ABI Prism® 7500 Fast SDS (Applied Biosystems), LightCycler® 480 Instrument II (Roche), Rotor-Gene® 6000 (Corbett Research), Rotor-Gene® Q5/6 plex Platform (QIAGEN), Mx 3005P™ QPCR System (Stratagene), VERSANT® kPCR Molecular System AD (Siemens Healthcare), CFX96™ Dx System (Bio-Rad), CFX96™ Deep Well Dx System (Bio-Rad)

always a drop ahead.

HEADQUARTERS

altona Diagnostics GmbH

Mörkenstr. 12

22767 Hamburg, Germany

phone +49 40 548 0676 0

fax +49 40 548 0676 10

e-mail info@altona-diagnostics.com

www.altona-diagnostics.com

Products not licensed with Health Canada and not FDA cleared or approved. Not available in all countries.
altona®, RealStar® and all associated marks are registered trademarks of altona Diagnostics GmbH.
All other registered names and trademarks used in this document are not to be considered unprotected by law.

© altona Diagnostics GmbH 2022. All rights reserved.