

## SARAGENE™ Hepatitis B Virus Real-Time PCR Test

## **HBV Real-Time PCR Test Information**

The Hepatitis B Virus (HBV) Real-Time PCR (RT-PCR)

Test is used to detect the presence or absence of HBV

genotypes A-H. HBV is an Orthohepadnavirus that is

constructed of a circular genome comprised mainly of

DNA. This test is optimized for use on DNA extracted from

serum or EDTA plasma samples.

## **Results within two hours**

The HBV tests can be performed in less than two hours. The test requires a clean, contamination free environment with a hood, centrifuge, pipettes and RT-PCR machine. The test is compatible with most RT-PCR devices with green and orange channels and it can be customized to work with a myriad dyes and PCR technologies.

# DNA Extraction <60 Minutes Assay Run Time 40-60 Minutes Analysis <10 Minutes

## **HBV RT-PCR KIT**

- Compatible with multiple sample types, platforms
- Simple and streamlined workflow
- Includes internal control to verify sample quality
- Includes positive control
- Produces results that are easy to interpret







## SARAGENE™ Hepatitis B Virus

**Real-Time PCR Test Specifications** 

## **About CoDx<sup>™</sup> Technology**

The HBV kit is developed using a revolutionary molecular diagnostics technology called CoPrimers<sup>™</sup>, a technology invented and patented by Co-Diagnostics, Inc (Utah, USA).

CoDx technology is mathematically engineered to enhance the speed, accuracy and cost-effectiveness of RT-PCR. The technology is based on cooperative theory, a mathematical model developed by Brent Satterfield, Ph.D. This model applies advanced algorithms and bioinformatics to optimize design parameters with analyte targets. In comparison with other technologies, the CoPrimers reduce the formation of primer-dimers, increase specificity and increase ability to multiplex. The Journal of Molecular Diagnostics (March 2014) introduced CoPrimers as a "new class of primer technology that greatly reduces primer-dimer propagation, showing a 2.5 million-fold improvement in reduction of nonspecific amplification."

Application	Qualitative RT-PCR	
Sample type	EDTA plasma or serum	
Type of detection	Presence or absence of HBV	
Specificity	HBV genotypes A-H	
Limit of Detection	Gene Markers Limit of Detection (copies/μL)  HBV 5	
Thermal cycler compatibility	Most RT-PCR systems with the following channel compatibilities: Green (FAM™) and Orange (CAL Fluor® Red 610)	

## **HBV Kit Includes**

MM	Master Mix
PC	<b>Positive Control</b>
NC	Negative Control

## Ordering Information

Product Name	Number of Reaction
SARAGENE <sup>™</sup> HBV Real-Time PCR KIT	25 Rxs
	50 Rxs
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<sup>\*</sup> RT PCR machine available on request

The performance of the HBV RT-PCR Test has been evaluated for precision, accuracy, sensitivity and specificity for relevant HBV genotypes A-H.

Intended Use: For the Detection of Hepatitis B Virus (HBV)





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