

Viga Quantitative HBV Molecular Diagnostic Kit

Store at **-15°C to -30°C in darkness**

100 rxn

Cat NO: MD003055

25 rxn

Cat NO: MD003056

By ROJE

Edition, 02/2022

2022 ROJETechnologies, all rights reserved

Kit Content

Viga Quantitative HBV Molecular Diagnostic Kit

Components	25 Preps	100 Preps
Pro HBV Mix	220 µl	875µl
QD-ROMAX, 4X	160 µl	625µl
IC	125 µl	500µl
HBV *QS1(1×105 IU/µl)	65µl	250µl
HBV *QS2(1×104 IU/µl)	65µl	250µl
HBV *QS3(1×103 IU/µl)	65µl	250µl
HBV *QS4(1×102 IU/µl)	65µl	250µl
HBV *QS5(1×101 IU/µl)	65µl	250µl
Water (Molecular Biology grade)	125µl	500µl

Recommended Starting Material

DNA Sample Requirement

Before starting, add 2-5 cc blood sample into a tube containing EDTA. After plasma isolation and

DNA extraction, utilize 10µl of whole prepared sample in Real Time-PCR.

Before start

Before first use, make sure about intactness and completeness of kit contents and reagents. Avoiding utilizing samples other than human plasma to prevent incorrect IVD examination results.

Misusing the reagents may lead to contamination and invalid results.

Use RNAase/DNAase free tip sampler with filter.

Buffer preparation

Master mix preparation

The total volume of prepared sample used in this test is 10 µl. Refer table2. Required information for preparing tubes is available in tables 3,4,5. If you use internal control, refer to the following information in the handbook.

Notice: prepare Master mix just for single-use and avoid adding QD-ROMAX to Pro HBV mix if you do not need to test.

Table1: Regents preparation per one single reaction (DNA isolation efficiency and PCR inhibition is controlled by adding internal control in purification stage).

Required component	volume
Pro HBV Mix	8.75µl
QD-ROMAX, 4X	6.25µl
Purified DNA	10µl

Table 2: Required volumes for standard tubes

Standards	Volume per tube	Pro HBV Mix + QD-ROMAX, 4X per reaction
QS1	10µl	15µl
QS2	10µl	15µl
QS3	10µl	15µl
QS4	10µl	15µl
QS5	10µl	15µl

Table 3: Required volumes for every single test tubes

Volume per tube of an unknown sample	Pro HBV Mix + QD-ROMAX, 4X per reaction
10µl	15µl

Table 4: Required volumes for negative control tubes

Volume per tube of water*	Pro HBV Mix + QD-ROMAX, 4X per reaction
10µl	15µl

Table 5: Thermal profile for Real Time PCR

stage	Temperature	Incubation Time	Cycle Numbers
Pre-Denaturation	95 °C	5 min	1
Denaturation	95 °C	10 sec	5
Annealing and Extension	58°C	60 sec	
Denaturation	95 °C	10 sec	40
Annealing and acquisition on channel Green	58°C	60 sec	

and Yellow Protocol

Take out each component from the kit and place them on a benchtop. Allow the reagents to equilibrate to room temperature, then briefly vortex each tube for later use. Before use, vortex briefly. Utilize 10 µl of whole prepared sample in Real-Time PCR.

Step 1: Prepare DNA
Add 0.1 µl internal control/µl final elution to isolated nucleic acid



Step 2: Mix 15 µl Master Mix and 10 µl prepared DNA



Step 3: Run the Real-Time PCR program



Step 4: Interpret the result

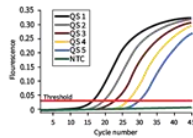


Figure 1: Addition of internal control during DNA amplification in PCR. In this case, Master mix

involves Pro HBV Mix and QD-ROMAX, 4x.

Step 1: Preparing Master Mix



Step 2: Add 15 µl Master Mix to new tube



Step 3: Add 1 µl internal control to step 2



Step 4: Transfer 15 µl of prepared mixture to a new tube



Step 5: Add 10 µl isolated nucleic acid to step 4



Step 6: Run the Real-Time PCR program



Step 7: Interpret the result

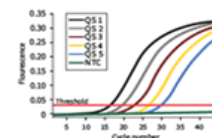


Figure2: Addition of internal control to Master mix. Notice that

there is not any addition of internal control on the purification stage. In this case, Master mix involves Pro HBV Mix and Q-ROMAX, 4x. For more information, refer Master mix preparation.