

Hepatitis G Pack

(REF: HEP/GPACK/100)



PRINCIPLE OF METHOD

GeneProof PCR kits offer our innovative One Workflow solution allowing the detection of multiple parameters in one run using our Universal PCR Profile for majority of the GeneProof PCR kits (RNA and DNA pathogens).

WORKFLOW

1. Use the required sample volume in accordance with the extraction manual.
2. Thaw the Universal Internal Control (purple cap) in the refrigerator (2 - 8 °C) for about 15 minutes. Vortex and briefly centrifuge the thawed solution before use. Add Universal Internal Control at 10% of the elution volume to each sample.
3. Perform sample extraction according to the appropriate protocol.
4. Thaw the PCR reagents in a refrigerator (2 - 8 °C) for 15 to 30 min. Vortex and centrifuge briefly before use:

GeneProof Hepatitis B Virus (HBV) PCR Kit

- HBV Master Mix (blue cap)
- Calibrator A HBV 10⁴ IU/μl (black cap)
- Calibrator B HBV 10³ IU/μl (brown cap)
- Calibrator C HBV 10² IU/μl (white cap)
- Calibrator D HBV 10¹ IU/μl (transparent cap)
- Negative control (NFW* - not included)

*NFW= Nuclease-free water

GeneProof Hepatitis C Virus (HCV) Diagnostic PCR Kit

- HCVD Master Mix (blue cap)
- Calibrator A HCVD 10⁵ IU/μl (black cap)
- Calibrator B HCVD 10⁴ IU/μl (brown cap)
- Calibrator C HCVD 10³ IU/μl (white cap)
- Calibrator D HCVD 10² IU/μl (transparent cap)
- Negative control (NFW* - not included)

ATTENTION! Reaction volume must be set to 40 μl.

5. **PCR preparation** (total reaction volume is 40 (HBV) or 50 (HCVD) μl), pipette:

- a) A1: 30 μl HBV Master Mix + 10 μl Calibrator A 10⁴ IU/μl
- b) B1: 30 μl HBV Master Mix + 10 μl Calibrator B 10³ IU/μl
- c) C1: 30 μl HBV Master Mix + 10 μl Calibrator C 10² IU/μl
- d) D1: 30 μl HBV Master Mix + 10 μl Calibrator D 10¹ IU/μl
- e) E1: 30 μl HBV Master Mix + 10 μl Negative Control
- f) F1: 30 μl HBV Master Mix + 10 μl extracted DNA/RNA

- a) A1: 30 μl HCVD Master Mix + 20 μl Calibrator A 10⁵ IU/μl
- b) B1: 30 μl HCVD Master Mix + 20 μl Calibrator B 10⁴ IU/μl
- c) C1: 30 μl HCVD Master Mix + 20 μl Calibrator C 10³ IU/μl
- d) D1: 30 μl HCVD Master Mix + 20 μl Calibrator D 10² IU/μl
- e) E1: 30 μl HCVD Master Mix + 20 μl Negative Control
- f) F1: 30 μl HCVD Master Mix + 20 μl extracted DNA/RNA

PCR Plate layout

	1	2	3	4	5	6	7	8	9	10	11	12
A	HBV CalA	HCVD CalA										
B	HBV CalB	HCVD CalB										
C	HBV CalC	HCVD CalC										
D	HBV CalD	HCVD CalD										
E	HBV NC	HCVD NC										
F	HBV S1	HCVD S1										
G	HBV S2	HCVD S2										
H	...											

CalA = Calibrator A; CalB = Calibrator B; CalC = Calibrator C; CalD = Calibrator D; NC = Negative Control;
S1 = unknown sample 1; S2 = unknown sample 2



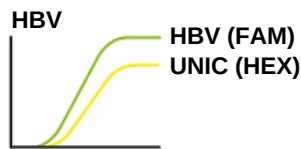
Hepatitis GPack

- Centrifuge the PCR plate briefly.
- Set up the Universal PCR Profile on the PCR cyclers according to the GeneProof Hepatitis C Virus (HCV) Diagnostic PCR Kit.

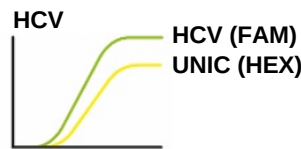
Step	Process	Temperature °C	Time
1	UNG decontamination/ Reverse Transcription	42	15 mins
2	Initial denaturation	95	10 mins
3	Denaturation	95	5 s
	Annealing	60	40 s
	Extension	72	20 s

EVALUATION

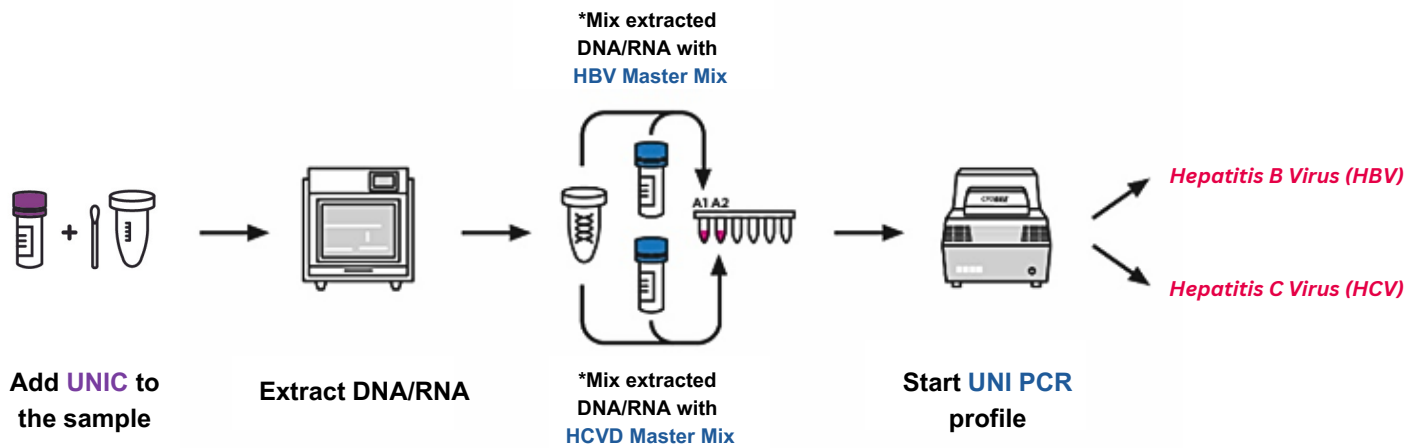
Column 1 - Hepatitis B Virus (HBV)



Column 2 - Hepatitis C Virus (HCV)



Hepatitis GPack Workflow



*Add appropriate number of Positive and Negative Controls according to the IFU

Choose from the Bloodborne G Packs Portfolio.
For the results that matter most.

1. Hepatitis GPack: detection of 2 pathogens
Hepatitis B Virus (HBV), Hepatitis C Virus (HCV)

2. Bloodborne GPack: detection of 3 pathogens
Hepatitis B Virus (HBV), Hepatitis C Virus (HCV),
HIV type 1 (HIV-1)