

GeneProof Epstein-Barr Virus (EBV) PCR Kit





PART OF I/T PANEL

- Easily combinable with other PCR kits from the Immunocompromised / Transplanted Panel in one workflow
- Simplifies laboratory workflow

W.H.O. STANDARD BASED QUANTIFICATION

 Precise and fully traceable quantification according to WHO 1st International Standard NIBSC 09/260

EASY-TO-USE CONCEPT

- Single tube ready-to-use Master Mix contains all components for PCR amplification
- No additional PCR reagents pipetting necessary

CONTAMINATION PREVENTION

 Ready-to-Use Master Mix contains Uracil-DNA glycosylase (UNG) and dUTPs eliminating possible carryover contamination

ORDER INFORMATION

REF	PACKAGE	
EBV/ISEX/025	25 reactions	
EBV/ISEX/100	100 reactions	







GeneProof Epstein-Barr Virus (EBV) PCR Kit

- + GeneProof Cytomegalovirus (CMV) PCR Kit
- + GeneProof Epstein-Barr Virus (EBV) PCR Kit
- + GeneProof BK/JC Virus (BK/JC) PCR Kit
- + GeneProof Aspergillus PCR Kit
- + GeneProof Herpes Simplex Virus (HSV-1/2) PCR Kit
- + GeneProof Human Herpesvirus 6/7 (HHV-6/7) PCR Kit
- + GeneProof Human Herpesvirus 8 (HHV-8) PCR Kit
- + GeneProof Parvovirus B19 PCR Kit
- + GeneProof Varicella Zoster Virus (VZV) PCR Kit

TECHNOLOGY	real-time PCR		
TYPE OF ANALYSIS	qualitative and quantitative		
TARGET SEQUENCE	DNA sequence of the single copy gene encoding the nuclear antigen 1 (EBNA1)		
ANALYTICAL SPECIFICITY	Epstein-Barr virus, 100 %		
ANALYTICAL SENSITIVITY (LOD WITH 95 % PROBABILITY)	Performed on EBV NIBSC 09/260	manual extraction GeneProof PathogenFree DNA Isolation Kit	automatic extraction croBEE 201A Nucleic Acid Extraction Kit
	Plasma	196.1 IU/ml	289.5 IU/ml
	Whole blood	129.2 IU/ml	250.2 IU/ml
	CSF	110.8 IU/ml	586.1 IU/ml
DIAGNOSTIC SPECIFICITY	94.19 % (Cl _{95%} : 86.35 % - 97.84 %)		
DIAGNOSTIC SENSITIVITY	99.10 % (Cl _{95%} : 96.45 % - 99.84 %)		
POSITIVE PREDICTIVE VALUE	97.79 % (Cl _{95%} : 94.63 % - 99.18 %)		
NEGATIVE PREDICTIVE VALUE	94.59 % (CI _{95%} : 90.76 % - 99.58 %)		
LINEAR RANGE	10^{10} – $10^{2.5}$ IU/ml with precision of \pm 0.5 log (using manual extraction GeneProof PathogenFree DNA Isolation Kit) 10^{10} – $10^{2.5}$ IU/ml with precision of \pm 0.5 log (using automatic extraction croBEE 201A Nucleic Acid Extraction Kit)		
DYNAMIC RANGE	10 ¹⁰ - 196.1 IU/ml (using manual extraction GeneProof PathogenFree DNA Isolation Kit) 10 ¹⁰ - 289.5 IU/ml (using automatic extraction croBEE 201A Nucleic Acid Extraction Kit)		
TRUENESS	-0.07 log (Cl _{95%} : -0.13 – 0.00) of expected concentration using manual extraction GeneProof PathogenFree DNA Isolation Kit -0.08 log (Cl _{95%} : -0.13 – 0.03) of expected concentration using automatic extraction croBEE 201A Nucleic Acid Extraction Kit		
PRECISION - REPEATABILITY	Intra-assay SD of log concentration = 0.084 (Cl _{95%} : 0.068 - 0.110)		
PRECISION - REPRODUCIBILITY	Inter-assay SD of log concentration = 0.092 (Cl _{95%} : 0.059 - 0.202)	Inter-lot SD of log concentration = 0.112 (Cl _{95%} : 0.072 - 0.246)	Total SD of log concentration = 0.115 (Cl _{osg:} 0.074 - 0.254)
REPORTING UNITS	IU/μI		
CONVERSION FACTOR	1 IU = 1 cp		
METROLOGICAL TRACEABILITY	EBV NIBSC 09/260 (1st WHO International Standard for Epstein-Barr Virus for Nucleic Acid Amplification Techniques)		
EXTRACTION/INHIBITION CONTROL	PCR inhibition and DNA extraction efficiency control		
VALIDATED SPECIMEN	BAL**, CSF, plasma, whole blood*		
STORAGE	-20 ± 5 °C		
VALIDATED EXTRACTION METHOD	croBEE 201A Nucleic Acid Extraction Kit GeneProof PathogenFree DNA Isolation Kit		
INSTRUMENTS	croBEE Real-Time PCR System Applied Biosystems 7300 / 7500 Real-Time PCR System AriaMx Real-Time PCR System CFX Connect™ / CFX96™/ Dx Real-Time PCR Detection System LightCycler* 2.0 / 480	LineGene 9600 / 9600 Plus Mic qPCR Cycler Montania 4896 Real-Time PC QuantStudio™ 3 / 5 Real-Tin Rotor-Gene 3000 / Q SLAN® Real-Time PCR Syste StepOne™ / StepOne Plus™	me PCR System m
	FAM, HEX		
REQUIRED DETECTION CHANNELS	FAM, HEX		
REQUIRED DETECTION CHANNELS EXTERNAL QUALITY ASSESSMENT	FAM, HEX Regularly tested by QCMD and Instand e.V. Extern	nal Quality Assessment Panels - r	results at www.geneproof.com

^{*} EBV persists latently in memory B-cell at low viral level. Therefore, even healthy individuals can carry measurable EBV load in their peripheral blood.

^{**} Due to the possible inhomogeneity in the BAL collection, the product is intended only for qualitative determination from this material.