



PARVOVIRUS B19 R-GENE®

REAL TIME PCR ASSAYS - ARGENE® TRANSPLANT RANGE

The power of true experience



PIONEERING DIAGNOSTICS



PARVOVIRUS B19 R-GENE®

KEY FEATURES

- Ready-to-use reagents
- Complete qualitative and quantitative kit
- Validated on most relevant sample types
- Validated with the major extraction and amplification platforms
- Designed for low to high throughput analysis
- Same procedure for all the ARGENE® Transplant kits
- Detect and quantify the 3 Parvovirus B19 genotypes

CLINICAL CONTEXT¹

Parvovirus B19 (B19V) is a DNA virus, classified into 3 distinct genotypes, member of the Parvoviridae family. B19V infections are common worldwide, with regional epidemiological differences. Seroprevalence in the population increases with age, reaching 80% in adults. After primo-infection, B19V may persist in marrow and in many tissues. B19V infections, likely asymptomatic, can cause a wide range of diseases: fifth disease (erythema infectiosum) in healthy children, arthropathy in healthy adults, hydrops fetalis in pregnant women, transient aplastic crisis in patients suffering from chronic hemolytic disorders, and chronic Pure Red Cell Aplasia (PRCA) in immunocompromised patients.

In transplant patients, chronic PRCA due to B19V occurs. Symptoms can be fever, cutaneous eruption, or joint pain. Because of lacks of typical signs, the diagnosis can be obscure. However, identification of B19V infection causing PRCA is important, as effective antibody therapy is available and easily applied¹.



TECHNICAL INFORMATION

ORDERING INFORMATION	Parvovirus B19 R-GENE® - Ref. 69-019B
Type of kit	Real-time detection and quantification kit
Gene target	NS1 coding for non-structural protein NS1
Validated specimens	Whole blood, Plasma, Serum, Bone marrow, Medullary plasma
Validated extraction platforms	EMAG®, easyMAG®, MagNA Pure Compact, MagNA Pure LC, QIA Symphony SP, EZ1 Advanced XL, QIAamp DNA Blood Mini Kit, DNA Extraction kit (ref. 67-000)
Validated amplification platforms	LightCycler 2.0, LightCycler 480 (System II), ABI 7500, ABI 7500 Fast, ABI 7500 Fast Dx, ViiA 7, StepOne, Rotor-Gene Q, CFX96
Limit of Detection (LoD 95%)	Whole blood: 1.7 log ₁₀ copies/mL Plasma: 1.8 log ₁₀ copies/mL Bone Marrow: 2.5 log ₁₀ copies/mL
Quantification range	Whole Blood: 1.6 to 10.7 log ₁₀ copies/mL Plasma: 2.0 to 10.7 log ₁₀ copies/mL Serum: 2.5 to 10.7 log ₁₀ copies/mL Bone Marrow: 3.2 to 10.2 log ₁₀ copies/mL
Controls included	Extraction / Inhibition Control, Negative Control, Positive Control (QS3), 4 Quantification Standards, Sensitivity Control
Number of tests	90 tests
Storage conditions	-15°C / -31°C
Status	For <i>in vitro</i> diagnostic use, CE-IVD marking

OTHER ARGENE® TRANSPLANT KITS

- EBV R-GENE® (69-002B) • CMV R-GENE® (69-003B) • HSV1 HSV2 VZV R-GENE® (69-004B) • ADENOVIRUS R-GENE® (69-010B)
- BK Virus R-GENE® (69-013B) • CMV HHV6,7,8 R-GENE® (69-100B)

REFERENCE

1. Qiu et al. Human Parvoviruses. Clinical Microbiology Reviews 2017; 30: 43-113