



HHV6 R-GENE®

REAL TIME PCR ASSAYS - ARGENE® TRANSPLANT RANGE

The power of true experience



PIONEERING DIAGNOSTICS



HHV6 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
- for low to high throughput analysis
- Same procedure for all the ARGENE® TRANSPLANT kits
- Detect and quantify the 2 species HHV-6A & HHV-6B (without subtyping)

CLINICAL CONTEXT^{1,2}

Human herpesvirus 6 (HHV-6) is a DNA virus, member of the *Herpesviridae* family, that includes two species: HHV-6A and HHV-6B. This is an ubiquitous virus with a seroprevalence reaching more than 90% in adult population. Primary infection most often occurs before 2 years old, causing roseola infantum. After primo-infection, HHV-6 remains latent in various cells including monocytes, macrophages, endothelial cells, bone marrow progenitors and central nervous system cells. As a noticeable difference with other human herpesviruses, genomic HHV-6 DNA can be integrated into the cell chromosomes (ciHHV-6) in about 1% of the general population. During specific pathological states (e.g. immunocompromised patients), HHV-6 can be reactivated and impact several organs.

In transplant patients, HHV-6 reactivation may result in a wide clinical spectrum: bone marrow suppression, graft rejection, pneumonitis, encephalitis, hepatitis, fever, skin rash... Among these patients, hematopoietic stem cell transplant recipients are particularly at risk of developing an HHV-6 reactivation (about 50% within the first 4 weeks after cell transfer). Severe complications linked to this active infection include delayed engraftment, graft versus host disease, and HHV-6 encephalitis.



TECHNICAL INFORMATION

ORDERING INFORMATION	HHV6 R-GENE® - Ref.69-006B
Type of kit	Real-time detection and quantification kit
Gene target	U57 gene coding for major capsid protein
Validated specimens	Whole blood, Plasma, CSF, BAL
Validated extraction platforms	EMAG®, NUCLISENS® easyMAG®, MagNA Pure 96, QIA Symphony SP
Validated amplification platforms	ABI 7500 Fast, ABI 7500 Fast Dx, LightCycler 480 (System II), Rotor-Gene Q, CFX96
Limit of Detection (LoD 95%)	Whole blood, plasma, CSF, BAL: 2.3 log ₁₀ copies/mL
Quantification Range	Whole blood, plasma, CSF, BAL: 2.7 to 8.0 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) • Parvovirus B19 R-GENE® (69-019B)

REFERENCE

1. Agut et al. Laboratory and clinical aspects of human herpesvirus 6 infections. *Clinical Microbiology Reviews* 2015; 28(2): 313-335
2. Komaroff et al. Summary of the 10th International Conference on Human Herpesviruses-6 and -7 (HHV-6A, -6B, and HHV-7). *Journal of Medical Virology* 2017; 1-6