

Rekom EBV High-Quality Raw Material

ReKom Biotech offers high-quality raw material for Epstein-Barr Virus IVD intended to:

- DIAGNOSIS OF INFECTIOUS MONONUCLEOSIS
- DIAGNOSIS OF DISORDERS IN IMMUNOCOMPROMISED INDIVIDUALS ASSOCIATED WITH EBV
- TRANSPLANTATION

PRODUCT PERFORMANCE:

- Versatility
- Validation
- Conjugation
- Reproducibility
- Broad spectrum
- Specificity and sensitivity
- Technical support
- Costs reduction and fast delivery



REKOM RAW MATERIAL FOR EBV IVD

| NAME | CAT NUMBER | SOURCE | APPLICATION | DESCRIPTION |
|-------------|-------------|---------|--------------------------|-------------------------------------|
| EBNA1 | RAG0007 👷 | E. coli | WB, DB, IE, DE, CLIA, LF | Late nuclear antigen |
| | RAG0047 👷 | E. coli | WB, DB, IE, DE | |
| p18 | RAG0049 👷 | E. coli | WB, DB, IE, DE, CLIA, LF | Viral capsid antigen |
| | RAG0049BIOT | E. coli | WB, DB, CE, NP, PO | p18 biotinylated |
| p23 | RAG0002 | E. coli | WB, DB, IE, DE, CLIA, LF | Viral capsid antigen |
| p54 | RAG0035 👷 | E. coli | WB, DB, IE, DE | Early antigen |
| | RAG0035BIOT | E. coli | WB, DB, CE, NP, PO | p54 biotinylated |
| p138 | RAG0033 | E. coli | WB, DB, IE, DE | Early antigen |
| ZEBRA | RAG0023 | E. coli | WB, DB, IE, DE | Transcription factor, early antigen |
| ChimEBV-VCA | RAG0081 | E. coli | WB, DB, IE, DE, CLIA, LF | Recombinant chimeric antigen |
| ChimEBV-EA | RAG0082 | E. coli | WB, DB, IE, DE, CLIA, LF | Recombinant chimeric antigen |

WB: Western Blot DB: Dot Blot IE: Indirect ELISA DE: positive control in direct ELISA CLIA: Chemiluminescent Immunoassay LF: Lateral Flow CE: Capture ELISA DAS: Double antigen sandwich NP: nanoparticles binding PO: plate orientation Pack size: 0.1 mg*; 1 mg; bulk Format: liquid; lyophilised *under availability



👰 Top product (Satisfaction guarantee)

Epstein-Barr virus (EBV) is the major cause of infectious mononucleosis (IM) with an antibody prevalence rates reaching 95% or higher among elderly individuals.

Although the EBV genome encodes a number of different structural and nonstructural genes, those of most importance for serodiagnosis are the genes encoding the viral capsid antigens (VCAs), the early antigens (EAs) and the EBNAs: EBNA-1 and EBNA-2. More specifically, only three serological parameters are essential for the detection of EBV-specific antibodies in immunocompetent individuals on a qualitative basis, i.e., VCA IgG, VCA IgM and EBNA-1 IgG.

Clinical symptoms and diagnostic approaches differ according to the immune status of the patients:

- In immunocompetent individuals primary infection with EBV is most often frequently asymptomatic.
- IM may present as a mild infectious illness of young children, but in young adults primary EBV infection can cause a type of IM known as the Pfeiffer's Drüsenfieber (glandular fever) or kissing disease.
- EBV reactivation is not correlated to any disease so far in immunocompetent individuals, though it is a common phenomenon in such persons.
- In immunocompromised individuals, EBV is associated with disorders with high rates of morbidity and mortality. The spectrum ranges from benign B-cell hyperplasia resembling IM to more classic malignant lymphomas. In these patients an early detection of EBV replication and a high positive predictive value for the respective disease are required.



EBV Infection Kinetics

Estimated Ab prevalence rates early after clinical presentation in a single acute-phase serum sample from immunocompetent individuals with primary EBV infections

| Antigens | Ab | Prevalence (%) | Method |
|----------------|-----|----------------|---------------------------|
| Heterophile Ab | IgM | 50-85 | Agglutination, rapid test |
| VCA | IgG | 98-100 | IFA, EIA, WB |
| VCA | IgM | 70-100 | IFA, EIA, WB |
| EBNA-1 | IgG | 0 | IFA, EIA, WB |
| EA | IgG | 60-89 | IFA, EIA, WB |

Table obtained from Hess, R.D. Routine Epstein-Barr Virus Diagnostics from the Laboratory Perspective: Still Challenging after 35 Years. 2004. Journal of Clinincal Microbiology, 42:3381–3387.

