

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
- ▶ Cojugation
- ▶ Reproducibility
- ▶ Broad spectrum
- ▶ Specificity and sensitivity
- ▶ Technical support
- ▶ Costs reduction and fast delivery



REKOM RAW MATERIAL FOR EBV IVD

REFERENCE	ANTIGEN	APPLICATION	PACK SIZE
RAG0007	EBNA-1	ELISA, CLIA	0.1 mg to 1 mg; bulk
RAG0002	p23 (VCA)	ELISA, CLIA	0.1 mg to 1 mg; bulk
RAG0049	p18 (VCA)	ELISA, CLIA	0.1 mg to 1 mg; bulk
RAG0035	p54 (EA)	ELISA	0.1 mg to 1 mg; bulk
RAG0033	p138 (EA)	ELISA	0.1 mg to 1 mg; bulk
RAG0023	zebra (EA)	ELISA	0.1 mg to 1 mg; bulk

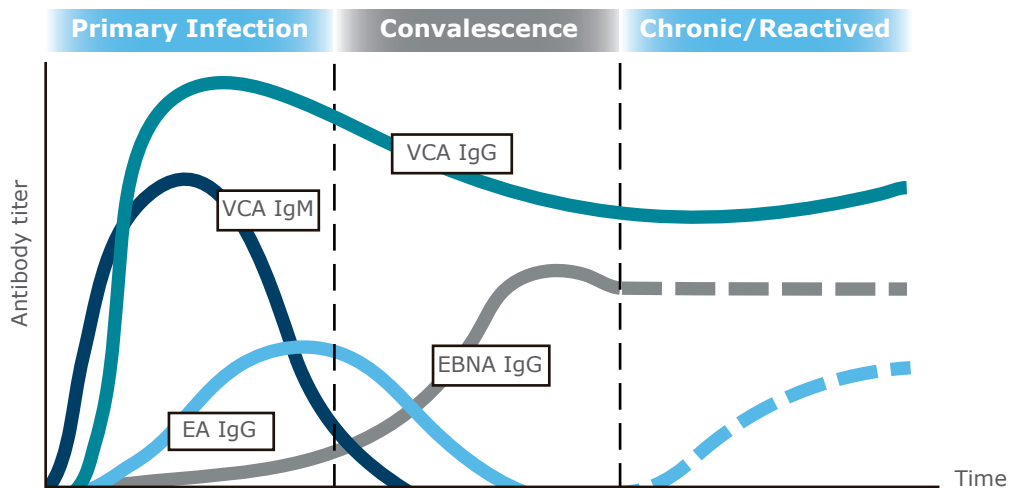
Epstein-Barr virus (EBV) is the major cause of infectious mononucleosis (IM) with an antibody prevalence rates reaching 95% or higher among elderly individuals.

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 Clinical Microbiology, 42:3381-3387.