Epstein-Barr Virus



recomWell EBV EBNA IgG recomWell EBV VCA IgG recomWell EBV EA IgG recomWell EBV IgM

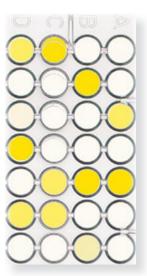
Enzyme immunoassay with antigens produced by recombinant techniques for the detection of IgG and IgM antibodies against Epstein-Barr Virus (EBV)

The Epstein-Barr virus, an ubiquitously occurring herpes virus, can cause the symptoms of infectious mononucleosis (Pfeiffer's disease) on primary infection. Moreover, as a result of the lifelong persistence of this pathogen, reactivations can occur, especially in immuno-incompetent persons.

Due to the diversity of symptoms caused by EBV infection and their correspondence with the symptoms of other diseases, a secure EBV diagnosis is of great relevance for differential diagnostics. One of the main tasks in routine diagnosis is therefore the serological differentiation of a primary infection from a past infection and the exclusion of an EBV infection.

The *recom*Well EBV ELISA test systems are highly sensitive screening tests for detection of Epstein-Barr virus antibodies (IgG, IgM). Due to genetical engineering highly specific and characteristic EBV proteins can be used. A classification into the different stages of infection (primary infection, past infection) is possible due to the time-shifted appearance of antibodies against different EBV antigens.

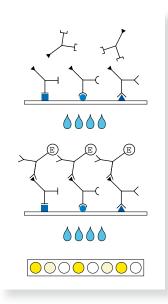
Besides the detection of serum antibodies, the *recom*Well EBV VCA IgG test is suited for the determination of antibodies from CSF. By this the EBV specific antibody index from CSF and serum can be calculated



Product Advantages

- Reliable EBV screening
 - > Safe detection of past infections with the recomWell EBV EBNA IgG due to the very high specificity of the diagnostic EBV key antigen EBNA-1
 - > **Detection of primary EBV infections already in the early phase** due to the optimised antigen composition of the *recom*Well EBV VCA IgG and *recom*Well EBV IgM test systems
 - ➤ No Rheumatoid factor treatment in the recomWell IgM test system necessary
- · Recombinant antigens
 - High Sensitivity and specificity
 - > Excellent discrimination between negative and positive results
- Identical procedure for IgG and IgM determination
- Easy to quantify
- Standardised CSF-serum analysis for recomWell EBV VCA IgG available
- Easy test procedure; automation possible
- Test procedure and reagents identical in all recomWell ELISA reagents exchangeable
- Break-a-parts: Single sample examination possible
- CE label: The recomWell EBV test systems meet the high standard of the EC directive 98/79/EC on in vitro diagnostic medical devices

Test Principle and Procedure



Indirect sandwich test.

Recombinant antigens are bound to the solid phase.

1st Incubation Add patient samples diluted 1:101 (sample 10 µl of

serum or plasma), incubate for 1 h at 37 °C.

wash 4 times

2nd Incubation Add peroxidase conjugated anti-human IgG or IgM

antibodies, incubate 30 min at 37 °C.

wash 4 times

Color reaction Add ready-to-use TMB solution and incubate **30 min**

at room temperature. Stop the substrate solution with

H₃PO₄ and measure the extinction at 450 nm.

Evaluation

Diagnostic sensitivity and diagnostic specificity

	recomWell EBV EBNA IgG		recomWell EBV VCA IgG		recomWell EBV EA IgG		recomWell EBV lgM	
	Sensitivity	Specificity	Sensitivity	Specificity	Sensitivity	Specificity	Sensitivity	Specificity
EBV sero negative	-	100% (167/167)	-	99.4% (166/167)	-	98.8% (165/167)	-	100% (167/167)
Primary EBV Infection	-	100% (147/147)	98.6% (145/147)	-	94.0% (125/133)¹	-	91.7% (121/132) ²	-
Past EBV Infektion	99.4% (516/519) ³	-	99.8% (607/608)		-			-

¹Population with an anti-EBV-EA-IgG antibody response.

Article No.

7104 recomWell EBV EBNA IgG
Reagents for 96 determinations

7204 recomWell EBV VCA IgG
Reagents for 96 determinations

7004 recomWell EBV EA IgG
Reagents for 96 determinations

7205 recomWell EBV IgM
Reagents for 96 determinations

² Population with an anti-EBV-IgM antibody response.

³ Population with an anti-EBV-EBNA IgG antibody response.