

Epstein-Barr Virus Antibodies Test

Epstein-Barr virus (EBV) test is used to detect EBV antibodies in the blood and help diagnose an EBV infection.

EBV is a virus that causes a mild or moderate infection. This infection is very common – about 95% of people in the U.S. have been infected with EBV. The virus is present in saliva of an infected person and is easily passed from person to person. Most people get infected by EBV in childhood. The infection has an incubation period, which lasts several weeks. During the acute stage of the infection, the virus multiplies in number. Children and teens are less likely to experience any symptoms of infection. In adults, EBV can cause infectious mononucleosis, which is associated with symptoms like: fatigue, fever, sore throat, enlarged lymph nodes and spleen. After 1-2 months these symptoms resolve and number of EBV in blood decreases, but the virus never goes away completely. EBV remains in a latent form in the body for the rest of the life and may reactivate, but isn't dangerous unless the patient's immune system is seriously weakened.

Why the EBV Antibodies Test is Performed?

The EBV antibodies test is used to:

- Diagnose infectious mononucleosis
- Distinguish between EBV infection and another illness with similar symptoms

The EBV test is ordered when:

- A person has symptoms of infectious mononucleosis
- A pregnant woman has symptoms of a viral illness. In this case, it is important to distinguish between EBV and conditions like CMV and toxoplasmosis
- The patient is an immune compromised person and asymptomatic, but has been in close contact with someone who has mononucleosis.

The test can detect the EBV infection and can even help the doctor find the difference between a recent and previous infection.

There are different types of EBV antibodies: Viral Capsid Antigen (VCA)-IgM antibody, VCA-IgG antibody, Early Antigen (EA-D) antibody, Epstein-Barr Nuclear Antigen (EBNA) antibody. The level of these antibodies rises and falls various times during EBV infection. Therefore, these antibodies give the doctor information about the stage of infection and whether it is a current, recent, or past infection.

How the Test is Performed and How to Prepare for the Test?

A blood sample is drawn from a vein. No special preparation is needed.

What Abnormal Results Mean

The symptoms and medical history are equally important when interpreting test results.

If EBV antibodies test is negative and the person is asymptomatic, this means that the person has never been infected with EBV.

If the result is positive, then this indicates a current or prior infection with EBV.

Positive VCA-IgM antibodies test suggests an EBV infection. If a person has positive VCA-IgG and EA-D IgG tests, then most likely he has a current or recent EBV infection.

Negative VCA-IgM, but positive VCA-IgG and EBNA antibody tests suggest a previous EBV infection.

Alternative Names

EBV antibodies test.

Useful Information

There are also two other antibodies – VCA-IgA and EA-R IgG, that arise during an EBV infection. However, these antibodies are very rarely tested.