

VARICELLA ZOSTER VIRUS

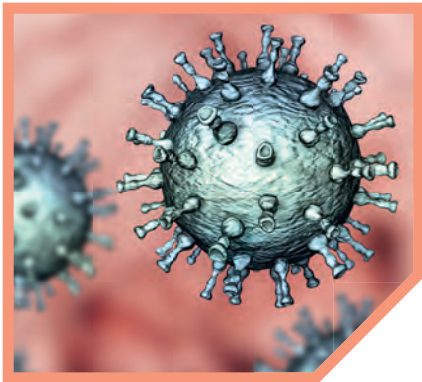
ELISA DETECTION OF IgG AND IgM ANTIBODIES

- Diagnostics of chicken pox and shingles
- Determination of intrathecal antibody synthesis in patients with neuroinfections



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VARICELLA ZOSTER VIRUS

Differential diagnostics

- Chicken pox and shingles
- Neurological diseases – aseptic encephalitis and meningitis, myelitis, cerebellitis, neuritis, chronic pain, vasculitis in CNS vs stroke
- Eye infections
- Exanthems (herpes simplex vs herpes zoster)

Characterisation of infection in connection with vaccination

Diagnostics of primoinfection in pregnant women

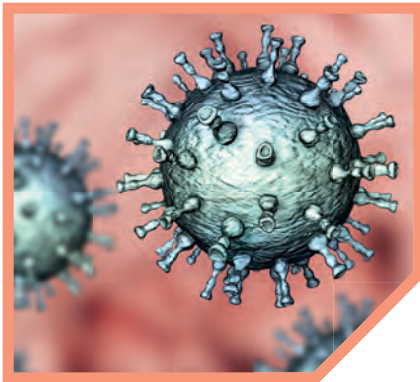
Varicella zoster virus (VZV) (human herpesvirus 3) causes chicken pox and shingles in humans. VZV can spread either through direct contact with a skin lesions or by droplet infection. VZV is highly contagious. It enters the organism through respiratory tract. After primary replication in nasopharyngeal mucosa, the virus moves forward to regional lymph nodes, where it infects lymphocytes and then spreads further by blood. The virus replication in the skin causes typical rash. After recovery from primary infection, virus remains latent in neurons of spinal ganglia. When the immune system is weakened, mostly in elderly people or in patients with malignancies, the latent infection reactivates and causes painful shingles – herpes zoster. Herpes zoster is a disease with typical dermatomally localised rash on the chest, the back or on the face. VZV-specific IgG antibodies are usually detected concurrently with the first symptoms of acute infection. Specific IgM and IgA antibody levels increase during the active infection (both primary infection and reactivation), decline in convalescent phase, but, in some cases, they may persist for weeks or months. Anti-VZV IgG antibodies have anamnestic character and can be utilized for the determination of individual immune status. Their significant increase in paired serum samples may indicate active infection. Determination of VZV IgG avidity is useful to distinguish between primary and past infection or reactivation.



Intended use and testing

ELISA-VIDITEST anti-VZV IgG (CSF), IgM and IgA kits are intended for the diagnostics of diseases associated with VZV infection. The kits are used also for the differential diagnostics of neuroinfections, eye and skin infections and exanthems.

ELISA-VIDITEST anti-VZV kits contain ready to use conjugate, controls and interchangeable VIDIA buffers, which makes the kits user-friendly and easy to use.



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ELISA DETECTION OF IgG AND IgM ANTIBODIES

ELISA-VIDITEST anti-VZV IgM kit includes RF-sorbent to eliminate interfering antibodies and rheumatoid factor.

Intrathecal antibodies determination gives the information about the anti-VZV antibodies production in central nervous system. For this purpose ELISA-VIDITEST anti-VZV IgG (CSF) should be used.

- Samples: serum, cerebrospinal fluid
- Quantitative determination using 5 standards
- Semiquantitative IgM and IgA detection
- Incubation times 30'/30'/15' at 37 °C
- CE IVD certified



Intrathecal synthesis

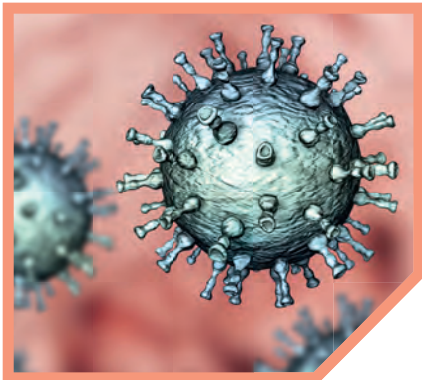
For the diagnostics of VZV-associated neuroinfections, it is necessary to determinate intrathecal sythesis of the specific IgG antibodies. Prerequisite for its determination is parallel detection of the antibodies concentration in serum and cerebrospinal fluid. Intrathecal synthesis is calculated using Reiber's equation and it is expressed by Antibody index.

The calculation requires the following data:

- Concentration of specific antibodies in serum and cerebrospinal fluid
- Total antibody concentration in serum and cerebrospinal fluid
- Concentration of albumin in serum and cerebrospinal fluid

Intrathecal synthesis IS interpretation

	Antibody index
Negative	< 1,5
Equivocal	1,5 – 2
Positive	> 2



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ELISA DETECTION OF IgG AND IgM ANTIBODIES

Advantages



- › Compatible VIDIA buffers – possibility of whole herpesvirus panel antibody examination from one serum dilution
- › Quantitative IgG data evaluation in mIU/ml
- › Compatible with **VIDIMAT**
- › Determination of IgG avidity
- › Intrathecal IgG synthesis determination
- › Ready to use HRP conjugate and controls

Ordering information

REF	Product	Wells	Sensitivity/specificity
ODZ-168	ELISA-VIDITEST anti-VZV IgG	96	98,6% / 98,6%
ODZ-087	ELISA-VIDITEST anti-VZV IgG (CSF)*	96	98,6% / 98,6%
ODZ-233	ELISA-VIDITEST anti-VZV IgG and IgG avidity	96	98,6% / 98,6%
ODZ-197	ELISA-VIDITEST anti-VZV IgM	96	100% / 98,2%
ODZ-284	ELISA-VIDITEST anti-VZV IgA	96	94% / 100%

* 5-point calibration, not compatible with VIDIMAT