### **ELISA-VIDITEST TICK-BORNE ENCEPHALITIS VIRUS - TBEV**



## VIDIA unique immunoenzymatic kit

- Intended for qualitative and semiguantitative determination of specific antibodies IgG and IgM against TBEV and avidity IgG antibodies determination.
- Intended for quantitative determination of specific IgG antibodies against TBEV and calculation of intrathecal synthesis.

### ... the way to the correct results





a proof of ongoing and recent active infection

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#### ANTIBODY RESPONSE

a proof of later phase of active and undergone infection

#### **Serological diagnostics**

is a basic prerequisite of effective therapy. A proof of infection, especially encephalitis (TBE) and meningoencephalitis, induced by the Tick-borne encephalitis virus (TBEV) is based on the determination of the concentration of specific antibodies using ELISA method. The serological report is to be interpreted only in context with the clinical picture of the patient.

#### **Benefits of the kits**

- Qualitative and semiguantitative evaluation of IgG and IgM antibodies
- Quantitative evaluation of IgG in Au/ml (VIEU/ml)
- Detection of post-infection and post-vaccine antibodies
- Determination of intrathecal synthesis of IgG antibodies
- Determination of avidity of IgG antibodies



### **ELISA-VIDITEST**

Kits come from our own research, development and production.

We are VIDIA spol s r. o. Czech biotechnological company with a wide range of kits for diagnostic examination. We develop our products with high quality.

## **ELISA-VIDITEST** Tick-borne encephalitis virus – TBEV

ELISA is an immunochemical method used for diagnostics of TBEV infections. It is based on the demonstration of the specific IgG and IgM antibodies production. These are produced by our organism during the immune response as a reaction to the antigen. **ELISA-VIDITEST** kits are used in early TBE diagnostics, in differential diagnostics of neuroinfections, monitoring the level of antibody response after vaccination and control of the protective effect of the vaccination. ELISA-VIDITEST anti-TBEV IgG and avidity IgG kit enables to determine low-avidity and high-avidity IgG antibodies, and therefore define primary and earlier underwent infections and condition after anti-TBEV vaccination.

The basis of the encephalitis diagnostics the determination of intrathecal synthesis of IgG specific antibodies in cerebrospinal fluid. As a proof, Reiber's formula describing a relationship between Q albumin and Q of the respective antibody is used. The concentrations of the particular antibodies in the serum and cerebrospinal fluid are determined with the so-called antibody index (AI) which states, whether a specific antibody concentration is the same as the total non-specific ones, or whether it is higher.

For completely automatic quantification and calculation of intrathecal synthesis we offer VIDISOFT 2 software or E-Calculator.

### Test principle and the procedure step by step



step

Preparation of reagents and samples Dilution, pipetting and the whole measuring process occurs in the VIDIMAT analyser completely automatically

ı step

occurs

solution

Pipetting of 100 µl of

### L step

- Pipetting of 100 µl controls and diluted samples into wells
- Binding of primary antibodies to antigens occurs on the solid surface of the wells
- Incubation for 30 minutes at 37 °C
- Suction and washing of the wells 4× 250 ml with the washing solution

# ı step

- Pipetting of 100 µl of peroxidase conjugate
- Binding of secondary antibody labelled by an enzyme to the primary antibody occurs during incubation
- Incubation for 30 minutes at 37 °C Suction and washing of the wells 4× 250 ml with the washing solution

### Benefits of the measurement

- Qualitative and semiquantitative determination of IgG and IgM antibodies in serum, plasma and cerebrospinal fluid
- Quantification of IgG using 1 standard by a software
- Calculation of intrathecal antibodies synthesis using VIDISOFT2 software or E-calculator
- Determination of avidity and IgG antibodies
- High sensitivity of the kits
- Unified incubation times, temperatures, reagents for all **ELISA-VIDITEST and MONO-VIDITEST**
- Manual or automatic test processing

step

- Measurement of absorption at 450/620-690 nm in 10 minutes from stopping the reaction
- Evaluation of the test result occurs completely automatically in **VIDIMAT** analyser



### VIDIMAT

We provide a precise automatic analyser for easy solutions of the infection serology automatization in cassette and microtiter plate format.

**Our kits** Products RFF ELISA-VIDITEST anti-TBEV IgG (CSF) **ODZ-192** (E IVD **ODZ-170** ELISA-VIDITEST anti-TBEV IgG and IgG avidity **ODZ-194** ELISA-VIDITEST anti-TBEV IgM







Meridian Healthcare srl Via Caronda, 446 - 95100 Catania -ITALY

