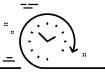
# ELISA-VIDITEST



### VIDIA new immunoenzymatic kits

• for the quantitative determination of chemokine CXCL13 in cerebrospinal fluid.

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



- Short detection time

High specificity

and sensitivity



Automatic

processing



#### Accurate LNB diagnostics

#### **Diagnosis of spirochetal neuroinfections**

Neuroborreliosis is a form of Lyme disease (LNB) affecting the central and peripheral nervous system (CNS). It is caused by an infection with Borrelia burgdorferi *sensu lato* due to a tick bite. The diagnosis of neuroborreliosis is based on the patient's medical history, clinical signs of infection, serum and cerebrospinal fluid (CSF) analysis, and serological evidence of borrelia antibodies. Chemokine ligand 13 (CXCL13) plays an important role in diagnosis as an accurate, highly sensitive diagnostic biomarker of early-stage neuroinfection.

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

- Accurate and rapid diagnosis of Lyme euroborreliosis
- Determination of CXCL13 level/concentration
- Aimed at urgent examinations



### 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 CXCL13

CXCL13 (chemokine ligand 13), also known as B-cell attracting chemokine 1 (BAC-1) or B-cell chemoattractant (BLC), is a member of the CXC chemokine family. CXCL13 is produced by dendritic cells, monocytes and mature macrophages. It activates the cellular immune response after binding to a specific G-receptor, CXCR5. It specifically stimulates B-lymphocytes and controls their migration from lymphoid tissues to the site of inflammation, especially into the cerebrospinal fluid (CSF). **CXCL13 is thus a key modulator of CNS inflammation. It appears to be of important clinical importance for the diagnosis and monitoring of Lyme neuroborreliosis (LNB) and other** 

neuroinfections. CXCL13 is expressed at high levels in the CSF of patients with early-stage LNB. Elevated CXCL13 concentrations correlate better with pleocytosis than with AI positivity. Patients with late-subacute neuroinfection occasionally show positive AI and low CXCL13 levels. CXCL13 levels decline rapidly after initiation of treatment. The ELISA-VIDITEST kit has a high sensitivity and specificity for the quantitative detection of the biomarker CXCL13 in cerebrospinal fluid. The kit provides quick information on CXCL13 levels in patients with symptoms of neuroinfection. CXCL13 level determination can also be used to differentiate between active and regressive LNB stages.

#### Test principle and the procedure step by step

### step

- Preparation of reagents and test CSF sample
- In the VIDIMAT analyzer, dilution, dosing and the entire measurement process take place completely automatically

2<sub>step</sub>

- Dispensing 100 µl of standards and diluted samples into the wells
   CXCL13 from the sample binds to
- antibodies on the solid surface of the wells
- Incubation 60 minutes at RT
  Aspiration and washing the wells with 4× 250 µl of wash solution

- **4** step
- Dispensing 100 µl of SA-Px conjugate
  SA-Px binds to the detection
- antibody
- Incubation 60 minutes at RT
- Aspiratione and washing the wells with 4× 250 µl of wash solution



- Dispensing 100 µl of TMB chromogen substrate solution
- The reaction of the enzyme with the substrate takes place
- Incubation 15 minutes at RT
- Dispensing 100 µl of STOP solution

### **3**∎ step

- Dispensing 100 µl of detection antibody
- The detection antibody binds to CXCL13, which has bound to the capture antibody
- Incubation 60 minutes at RT
  Aspiration and washing the wells with 4× 250 µl of wash solution

### 🔳 step

- Measurement of the absorbance at 450/620-690 nm within 20 minutes of stopping the reaction
- The evaluation of the test result takes place completely automatically in the VIDIMAT analyzer

VIDIMAT

We provide an accurate

of automation of infectious

automatic analyser for a simple solution

serology in monotest

and plate format.

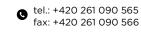
### Benefits of the measurement

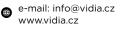
- Quantitative evaluation of biomarker CXCL13
- Quick information on CNS inflammation
- Diagnosis and monitoring of LNB and other neuroinfections
- Sample: cerebrospinal fluid
- High diagnostic specificity and sensitivity
- Color-coded r.t.u. reagents
- Manual/automatic processing in the analyzer VIDIMAD

#### VIDIA kits

REF	Product	Evaluation	Incubation	Sample	Number of tests	VIDIMAT
	ELISA-VIDITEST					
ODZ- 510	CXCL-13	quant.	60´/60´/60´/15´	cerebrospinal fluid	96	✓ NEW









( IVD