

ELISA-VIDITEST

Pseudomonas aeruginosa



Meridian Healthcare®
medical diagnostics and equipment

Color enhanced scanning electron micrograph (SEM) of *Pseudomonas aeruginosa*.

VIDIA new immunoenzymatic kits

- intended for quantitative determination of specific IgG antibodies against *Pseudomonas aeruginosa*.

... the way
to the correct
results



IgG
ANTIBODY RESPONSE

a proof of later phase of active
and chronic infection

Serological diagnostics

Pseudomonas aeruginosa is a common nosocomial pathogen. It represents 10-20 % of all infections acquired in a hospital. It is naturally resistant to many antibiotics used in clinical practice. Early detection of pseudomonas infection using serological diagnostics helps to select appropriate treatment, delay the chronic phase of infection, prevent the transmission of infection between patients and reduce the incidence of new infections.

Assay benefits

- Quantitative evaluation of antibodies
- Determination of antibody concentration (AU/ml) using the *E-CALCULATOR* software
- Sample: human serum and plasma



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.

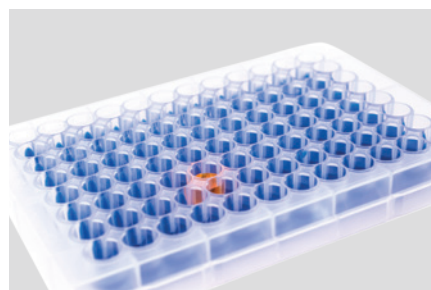
ELISA-VIDITEST

Pseudomonas aeruginosa

***Pseudomonas aeruginosa* is a common gram-negative opportunistic multi-resistant pathogen that causes acute and chronic infections, especially in immunocompromised patients. It is the most prevalent bacterium in the lungs of patients with cystic fibrosis (CF).** Acute infection at an early stage is associated with a planktonic lifestyle and shows high expression of virulence factors (VF). Chronic infection is characterized by low VF levels and high resistance to antibiotic treatment, mainly due to biofilm formation. Chronic *P. aeruginosa* infection is the primary cause of increased

morbidity and mortality in CF. Chronic infection in most patients is preceded by a stage of intermittent colonization. Then there is the emergence of mucoid variants of colonizing strains and the rise of antibodies against *Pseudomonas aeruginosa*. **Immunoenzymatic ELISA-VIDITEST kits are designed to monitor the course of early colonization and infection by determining the diagnostic value of growing anti-*Pseudomonas* antibodies. They help to identify patients with already proven chronic infection as well as patients at risk of developing chronic *Pseudomonas aeruginosa* infection.**

Test principle and the procedure step by step



1. step

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

2. 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 60 minutes at RT
- Suction and washing of the wells 4x250 µl with the washing solution

3. 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 60 minutes at RT.
- Suction and washing of the wells 4x250 µl with the washing solution

4. step

- Pipetting of 100 µl of chromogensubstrate solution TMB
- Reaction of enzyme and substrate occurs
- Incubation for 10 minutes at RT.
- Pipetting of 100 µl of the STOP solution

5. 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

Measurement benefits

- Quantitative evaluation of IgG antibodies
- Determination of antibody concentration in the examined sample (AU/ml) using the *E-CALCULATOR* program
- Quantitative evaluation using five standards
- A mixture of purified specific antigens
- Sample: human serum and plasma
- High diagnostic specificity and sensitivity
- Color-coded reagents r.t.u.
- Unified incubation times, temperatures, reagents for ELISA-VIDITEST and MONO-VIDITEST *anti-Pseudomonas*



VIDIMAT

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

VIDIA kits



| REF | Products | Evaluation | Incubation | Sample | Numbers of tests | VIDIMAT |
|----------------|---|------------|-----------------|---------------|------------------|--------------|
| ELISA-VIDITEST | | | | | | |
| ODZ-511 | anti- <i>Pseudomonas aeruginosa</i> IgG | quant. | 60' / 60' / 10' | serum, plasma | 96 | ✓ NEW |



VIDIA spol. s r.o.
Nad Safinou II 365, 252 50 Vestec
Czech Republic



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