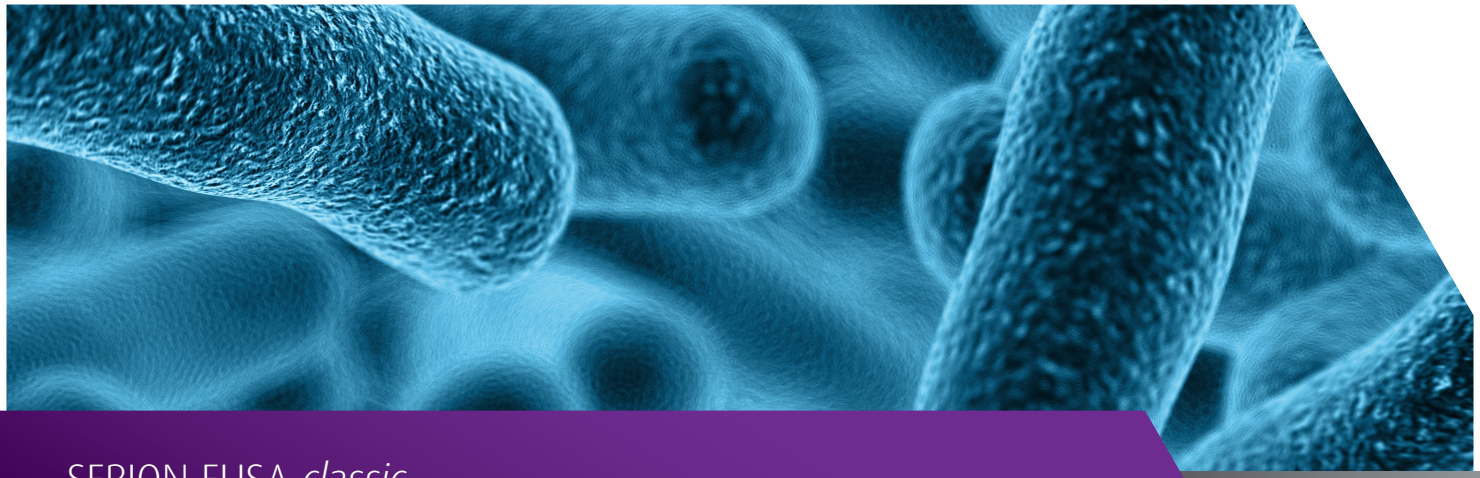

SERION ELISA *classic*

Francisella tularensis IgG/IgM

Intended use

- Qualitative and quantitative detection of human IgG and IgM antibodies in serum or plasma directed against the lipopolysaccharide (LPS) of *Francisella tularensis*
- Support in the diagnosis of tularemia
- Epidemiological studies

Diagnostic Efficiency

The evaluation of SERION ELISA *classic* Francisella tularensis IgG was performed in an internal study with 98 serum samples of healthy blood donors, 50 sera from patients with acute infection and 7 sera with reaction patterns of infection in the past against the ELISA of another manufacturer. The evaluation of SERION ELISA *classic* Francisella tularensis IgM was performed in an internal study with 97 serum samples of healthy blood donors and 55 from patients with infections against the ELISA of another manufacturer.

Product	Sensitivity	Specificity
SERION ELISA *classic* Francisella tularensis IgG	>99 %	99.0 %
SERION ELISA *classic* Francisella tularensis IgM	>99 %	96.4 %

Precision

SERION ELISA *classic* Francisella tularensis IgG

Sample	Mean value (OD)	Intraassay CV (%) (n=20)	Mean value (OD)	Interassay CV (%) (n=10)
Serum 1	0.810	3.4	0.859	6.3
Serum 2	1.153	2.1	1.239	8.4
Serum 3	1.898	2.7	2.007	3.6

SERION ELISA *classic* Francisella tularensis IgM

Sample	Mean value (OD)	Intraassay CV (%) (n=20)	Mean value (OD)	Interassay CV (%) (n=10)
Serum 1	0.445	7.4	0.574	8.2
Serum 2	0.604	5.9	0.607	9.2
Serum 3	1.307	4.4	1.219	7.9

Pathogen

Tularemia is a zoonosis caused by the bacterium *Francisella tularensis*. Two types of Francisella tularensis can be distinguished epidemiologically, biochemically and genotypically: *Francisella tularensis* biovar *tularensis* (type A) is highly virulent. If left untreated, the infection has a high mortality. *Francisella tularensis* biovar *holarctica* (type B) is much less virulent but can also cause severe illness.

Disease

The first symptoms of tularemia usually appear two to five days after the infection has occurred. Besides the classical general symptoms such as fever, malaise and joint and muscle pains, the clinical picture of tularemia can be very diverse. Inhalation of the pathogen often leads to a pulmonary manifestation (e. g. pneumonia) or to a septic, typhus-like illness. Infection through the digestive tract can cause vomiting, abdominal pain and diarrhoea. When identified promptly, tularemia can be treated effectively with antibiotics.

Diagnosis

Detection through culture from peripheral blood, swabs and biopsy material is difficult and can take several weeks. Since it is a highly infectious pathogen, such diagnostic tests are reserved for specialized laboratories. Serological diagnosis can be made by means of ELISA through the detection of specific antibodies.

Highlights

- Use of the lipopolysaccharid (LPS) of *Francisella tularensis* biovar *holarctica* for the demonstration of antibodies directed against *Francisella tularensis* Type A and Type B
- Quantification of IgG and IgM antibodies for disease stage monitoring and therapy control as well as vaccination control after immunization of soldiers or labor staff
- Excellent sensitivity and specificity values

Product	Order No.
SERION ELISA *classic* Francisella tularensis IgG	ESR142G
SERION ELISA *classic* Francisella tularensis IgM	ESR142M

SERION ELISA *control*

Please visit our website for more information.

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