



SERION ELISA *classic*

Mumps Virus IgG/IgM

Intended use

- Qualitative and quantitative detection of human IgG and IgM antibodies in serum or plasma directed against Mumps Virus
- Demonstration of IgM antibodies for the determination of acute infections
- Detection of IgG antibodies for determination of immune status
- Demonstration of intrathecally synthesized IgG antibodies in cerebrospinal fluid (CSF)

Diagnostic Efficiency

To evaluate the performance characteristics of the SERION ELISA *classic* Mumps Virus IgG, 197 serum samples from seronegative donors, patients with infection and plasmapheresis patients were examined in comparison to Mumps Virus IgG ELISA test systems from other manufacturers. To evaluate the performance characteristics of the SERION ELISA *classic* Mumps Virus IgM, 176 serum samples from patients with infection, study sera and from healthy blood donors were examined in comparison to Mumps Virus IgM ELISA test systems from other manufacturers.

Product	Sensitivity	Specificity
SERION ELISA <i>classic</i> Mumps Virus IgG	>99 %	98.2 %
SERION ELISA <i>classic</i> Mumps Virus IgM	96.3 %	97.6 %

Precision

SERION ELISA *classic* Mumps Virus IgG

Sample	Mean value (OD)	Intraassay CV (%) (n=20)	Mean value (OD)	Interassay CV (%) (n=10)
Serum 1	0.169	2.9	0.235	9.5
Serum 2	0.344	4.7	0.421	6.8
Serum 3	0.511	2.4	0.656	6.2

SERION ELISA *classic* Mumps Virus IgM

Sample	Mean value (OD)	Intraassay CV (%) (n=20)	Mean value (OD)	Interassay CV (%) (n=10)
Serum 1	0.692	6.3	0.897	4.9
Serum 2	0.856	4.1	1.123	6.5
Serum 3	1.849	4.7	2.228	2.9

Pathogen

Mumps Viruses belong to the family of *paramyxoviridae* and occur globally with humans being their only natural host. The pathogens are spread by droplet infection.

Disease

The clinical picture of mumps is very variable. Up to 40 % of infections remain asymptomatic or present with mild symptoms. Fever in combination with uni- or bilateral painful swelling of the salivary glands (parotitis) is the most typical presentation. Additionally, respiratory manifestations may be apparent. Childhood infections are mainly uncomplicated, but in adulthood a range of complications may occur. In 25 % of infected postpubertal patients organ manifestations such as orchitis or epididymitis, also pancreatitis, oophoritis, meningitis and encephalitis may occur. Late sequelae such as sterility as a consequence of testicular atrophy or deafness due to acoustic neuritis rarely occur. Pregnant women are especially exposed to the risk of abortion, but there is no risk of congenital malformation.

Diagnosis

Demonstration of IgM antibodies is commonly used as evidence for an acute infection and provides positive test results early on with the onset of symptoms. The demonstration of IgG antibodies serves primarily for immune status and vaccination control as well as for confirmation of Mumps Virus infections. The detection of IgG antibodies in CSF samples is particularly recommended in cases of suspected encephalitis.

Highlights

- Use of an inactivated Mumps Virus preparation
- Sensitive IgM detection for the diagnosis of acute infections
- Demonstration of IgG antibody activity for confirmation of Mumps Virus infection, for immune status determination and vaccination control
- Detection of intrathecally synthesized IgG antibodies for CSF diagnostics

Product	Order No.
SERION ELISA <i>classic</i> Mumps Virus IgG	ESR103G
SERION ELISA <i>classic</i> Mumps Virus IgM	ESR103M

SERION ELISA *control*

Please visit our website for more information.

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