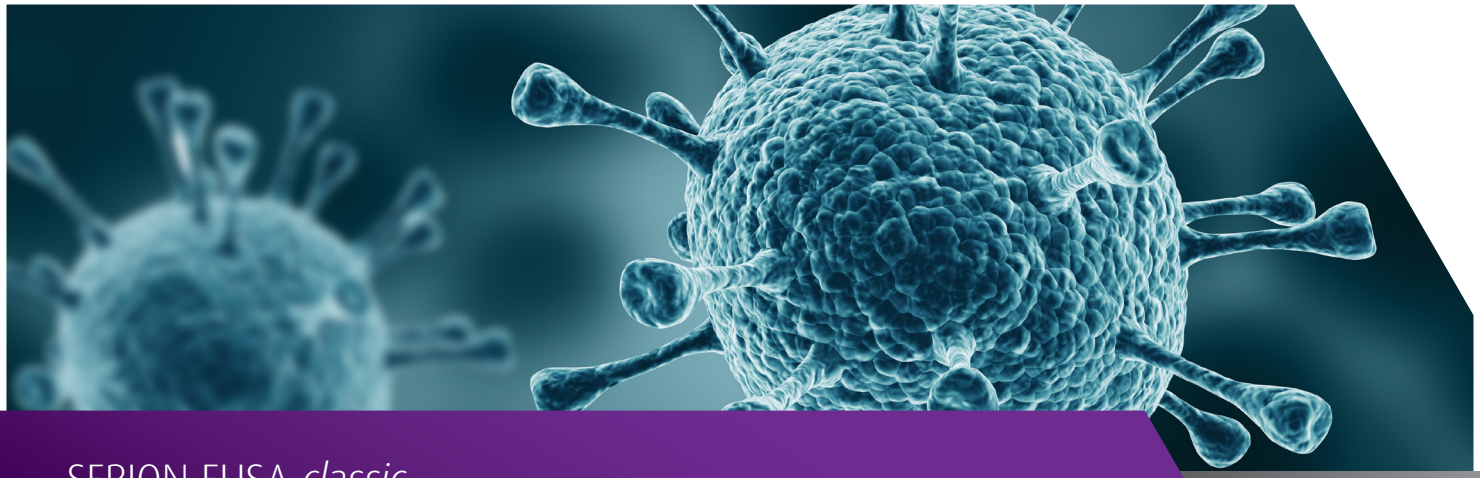

SERION ELISA *classic*

Parainfluenza Virus IgA/IgG

Intended use

- Qualitative and quantitative detection of human IgA and IgG antibodies in serum or plasma directed against all relevant human pathogenic Parainfluenza Viruses
- Detection of acute infections
- Confirmation of contact with the pathogen
- Differential diagnosis in case of respiratory infections

Diagnostic Efficiency

The SERION ELISA *classic* Parainfluenza Virus IgA (IgG) test was validated in an internal study by the analysis of 46 (45) serum samples from children under three years of age and 97 serum samples from patients with suspected Parainfluenza Virus infection against the ELISA of a leading European manufacturer. Due to the frequency of Parainfluenza Virus infections, the seroprevalence in the population is high. As a consequence, the SERION ELISA *classic* Parainfluenza Virus IgG test was adjusted in order to largely exclude the natural seroprevalence.

Product	Sensitivity	Specificity
SERION ELISA *classic* Parainfluenza Virus IgA	>99 %	95.0 %
SERION ELISA *classic* Parainfluenza Virus IgG	90.2 %	>99 %

Precision

SERION ELISA *classic* Parainfluenza Virus IgA

Sample	Mean value (OD)	Intraassay CV (%) (n=20)	Mean value (OD)	Interassay CV (%) (n=10)
Serum 1	0.266	3.5	0.357	11.7
Serum 2	0.577	4.1	0.717	10.8
Serum 3	1.446	1.2	1.762	2.6

SERION ELISA *classic* Parainfluenza Virus IgG

Sample	Mean value (OD)	Intraassay CV (%) (n=20)	Mean value (OD)	Interassay CV (%) (n=10)
Serum 1	0.362	1.3	0.388	7.3
Serum 2	0.569	2.0	0.602	5.5
Serum 3	1.135	1.0	1.198	5.0

Pathogen

Parainfluenza Viruses are worldwide distributed (-)ssRNA viruses belonging to the family of Paramyxoviridae. Currently, four serotypes have been identified. The Parainfluenza Virus types 1 to 3 are clinically most significant.

Disease

Human Parainfluenza Viruses are a common causative agent of infections of the respiratory tract, particularly in infants and children. Transmission of the viruses occurs by droplet infections. Parainfluenza Viruses cause mild to severe infections in the lower and upper respiratory tract which may manifest as rhinitis, cough, fever, non-diphtheric croup (acute laryngotracheobronchitis) or pneumonia. In infants, excessive formation of mucus and internal airway obstruction can occur. In adults, an infection usually results in mild catarrh of the upper respiratory tract.

Diagnosis

While the majority of patients infected with Parainfluenza Viruses develop IgG antibodies, IgM antibodies are detectable in approximately 50 % of cases. Thus, the specific detection of IgA antibodies should be performed analogous to other infectious diseases of the respiratory tract (e.g. Respiratory Syncytial Virus infections). Particularly in children under three years of age the combined use of IgG and IgA detection is recommended.

Highlights

- Use of inactivated preparations of Parainfluenza Viruses type 1, 2 and 3 for the demonstration of antibodies directed against all relevant human pathogenic Parainfluenza Viruses
- Exclusion of background seroprevalence of IgG antibodies resulting in the specific detection of clinically relevant antibody activities
- Differentiation between acute and past infections
- Quantitative determination of IgA and IgG antibodies for the analysis of paired sera for disease stage monitoring and therapy control

Product	Order No.
SERION ELISA *classic* Parainfluenza Virus IgA	ESR126A
SERION ELISA *classic* Parainfluenza Virus IgG	ESR126G

SERION ELISA *control*

Please visit our website for more information.

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