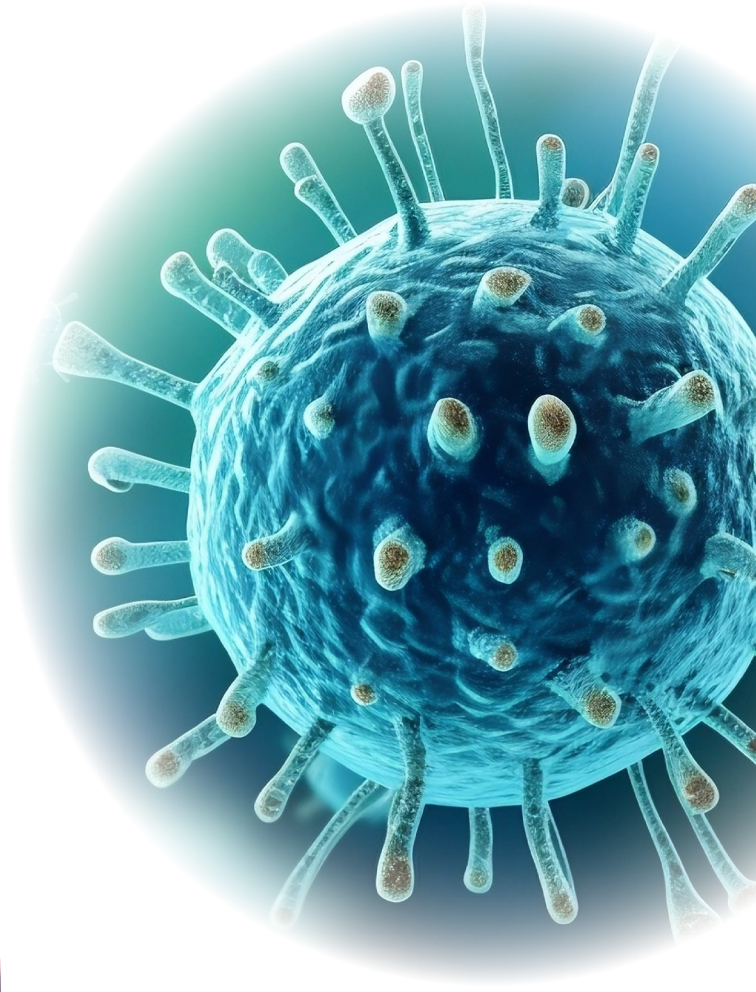
Anti-Measles Virus

Sensitive IgG and IgM antibody determination



sebia

The new language of life

Infections with Measles Virus
An often underestimated threat

Pathogen

The enveloped ss(-)RNA measles virus is a member of the *paramyxoviridae* family. Measles are one of the classic childhood diseases and belong to the most common infectious diseases worldwide.

Epidemiology

Measles viruses are widespread globally. Although the World Health Organization aims to eradicate measles, the incidence of measles has increased by 30 % in recent years. In 2019, the World Health Organization declared measles to be a threat to global health and recommends controlling and, if necessary, supplementing vaccination protection.

Transmission

The measles virus is transmitted through direct contact or through droplet infections.

Clinical Symptoms

Measles usually occur with flu-like symptoms and a characteristic rash. In immunocompetent individuals, the disease is usually harmless and provides lifelong immunity. In rare cases, complications such as pneumonia, otitis media, conjunctivitis or (meningo-) encephalitis (0.1 %) can occur. Inflammation of the cornea of the eyes as a result of a measles virus infection can lead to blindness. The rare subacute sclerosing panencephalitis (SSPE) is a fatal late consequence of measles. Immunization is recommended to prevent measles and their complications.

Diagnosis

The diagnosis of measles virus infections is based on the clinical symptoms and confirmed by laboratory analyses. IgM und IgG antibodies are generated during primary infection. Whereas IgM antibodies are usually no longer detectable a few weeks after primary infection, IgG antibodies generally remain life-long and are correlated with immune protection. Immune status determination against measles virus is particularly important during pregnancy.

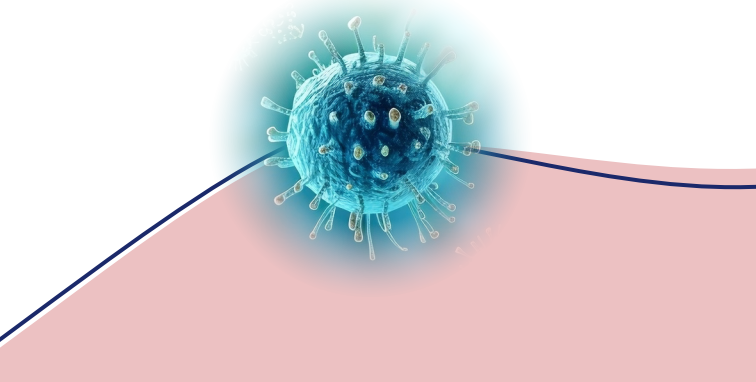
Anti-Measles Virus IgG / IgM Abs.
Sensitive antibody determination

Antigen

The Alegria Anti-Measles Virus IgG and IgM Abs. Monotests are based on a preparation of inactivated measles viruses (strain Edmonston) for a sensitive determination of IgG and IgM antibodies.

Calibration

The Alegria Anti-Measles Virus IgG Monotest is referenced to the international standard preparation NIBSC Code 97/648. Results are expressed in mIU/mL. The Alegria Anti-Measles Virus IgM Abs. Monotest is calibrated using an internal reference sample. Results are expressed in U/mL.



Sensitivity and Specificity

	Sensitivity	Specificity	Diagnostic Efficiency
Anti-Measles Virus IgG	> 99 %	97.5 %	> 99 %
Anti-Measles Virus IgM Abs.	88.9 %	> 99 %	> 99 %

Precision Anti-Measles Virus IgG

	Intraassay Repeatability		Interassay Reproducibility	
	Antibody Activity (mIU/mL)	Coeffcient of Variation (CV)	Antibody Activity (mIU/mL)	Coeffcient of Variation (CV)
Sample 1	86.6	5.0 %	81.9	5.8 %
Sample 2	194.3	7.0 %	230.5	9.6 %
Sample 3	3386.2	5.2 %	3679.2	3.3 %

Precision Anti-Measles Virus IgM Abs.

	Intraassay Repeatability		Interassay Reproducibility	
	Antibody Activity (U/mL)	Coeffcient of Variation (CV)	Antibody Activity (U/mL)	Coeffcient of Variation (CV)
Sample 1	13.8	4.4 %	11.3	9.2 %
Sample 2	23.3	8.1 %	21.1	3.7 %
Sample 3	163.1	4.9 %	131.1	11.5 %

Product Highlights

- ELISA-based random access determination of IgG and IgM antibodies against measles virus
- Full automation and complete traceability with Alegria 2
- Lab-on-a-Strip: ready-to-use test-specific reagents in individually sealed and barcoded Alegria Monotest strips
- Sensitive detection of IgG and IgM antibodies by use of inactivated measles viruses (strain Edmonston)
- Calibration of Anti-Measles Virus IgG Monotest with international standard NIBSC Code 97/648
- IgG antibody activity expressed in mIU/mL
- Integrated Rf-absorption prior to IgM detection
- Excellent diagnostic efficiency
- High reproducibility for reliable test results
- Economical all-in-one Alegria Monotests, particularly suited for small series
- Flexible combination of Alegria Monotests for optimal workflow efficiency

Ordering *information*

- Anti-Measles Virus IgG ..... **ORG 909G**
- Anti-Measles Virus IgM Abs. ..... **ORG 909MX**

Scan here **for more information** about Alegria Anti-Measles Virus Monotests

Literature

Latner, D.R. *et al.* (2020) Qualitative Variation among Commercial Immunoassays for Detection of Measles-Specific IgG. J. Clin. Microbiol. *58*, e00265-20.

Paules, C.I. *et al.* (2019) Measles in 2019 - Going Backward. N. Engl. J. Med. *380*, 2185 – 7.

Leung, A. K. *et al.* (2018) Measles: a disease often forgotten but not gone. Hong Kong Med. J. *24*, 512 - 20.

CE

ORGENTEC Diagnostika GmbH |
Carl-Zeiss-Straße 49-51 | 55129 Mainz | Deutschland |
Tel. : +49 6131 / 9258-0 | Fax : +49 6131 / 9258-58 | E-mail: orgentec@orgentec.com | **www.orgentec.com**