

Measles H (166): sc-57913

BACKGROUND

Measles virus (MV), also known as rubeola, is an acute viral illness that can be complicated by severe pneumonia, diarrhea and encephalitis. A paramyxovirus of the genus *Morbillivirus*, Measles virus is an enveloped and nonsegmented negative-stranded RNA virus. Because it is spread through respiration, Measles virus is highly contagious and airborne precautions should be taken for all suspected cases. The incubation period of the virus, during which there are no symptoms, normally lasts for 4-12 days. Infected people continue to be contagious from the initial symptoms until 3-5 days after a maculopapular rash appears. After transmission, the virus infects the epithelial cells of its new host, and may also replicate in the urinary tract, conjunctivae, blood vessels, lymphatic system and central nervous system. Humans and various monkey species remain the only known hosts of measles. Measles virus contains two envelope glycoproteins, the hemagglutinin (H) and fusion proteins, which are responsible for membrane fusion and attachment. Measles virus contains a protein that represses genome replication, protein V, which may function as an RNA-binding modulatory factor. The measles viroid consists of several major structural proteins, including fusion (F), nucleocapsid (N), matrix (M) and hemagglutinin (H).

REFERENCES

1. Sheshberadaran, H., et al. 1983. Monoclonal antibodies against five structural components of measles virus. I. Characterization of antigenic determinants on nine strains of measles virus. *Virology* 128: 341-353.
2. Sato, T.A., et al. 1985. Characterization of major structural proteins of measles virus with monoclonal antibodies. *J. Gen. Virol.* 66: 1397-1409.
3. Rima, B.K., et al. 1995. Temporal and geographical distribution of measles virus genotypes. *J. Gen. Virol.* 76: 1173-1180.
4. Halsey, N.A. 2006. Measles in developing countries. *BMJ* 333: 1234.
5. Centers for Disease Control and Prevention (CDC). 2006. Measles—United States. *MMWR Morb. Mortal. Wkly. Rep.* 55: 1348-1351.
6. Runkler, N., et al. 2007. Measles virus nucleocapsid transport to the plasma membrane requires stable expression and surface accumulation of the viral matrix protein. *Cell. Microbiol.* 9: 1203-1214.
7. Vijayaraghavan, M., et al. 2007. Measles supplemental immunization activities improve measles vaccine coverage and equity: evidence from Kenya, 2002. *Health Policy* 83: 27-36.
8. Tahara, M., et al. 2007. Altered interaction of the matrix protein with the cytoplasmic tail of hemagglutinin modulates measles virus growth by affecting virus assembly and cell-cell fusion. *J. Virol.* 81: 6827-6836.
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SOURCE

Measles H (166) is a mouse monoclonal antibody raised against the Edmonston strain of Measles virus.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Measles H (166) is recommended for detection of measles hemagglutinin of Measles Virus origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of Measles H: 76 kDa.

SELECT PRODUCT CITATIONS

1. Xia, M., et al. 2014. Mitophagy enhances oncolytic measles virus replication by mitigating DDX58/RIG-I-like receptor signaling. *J. Virol.* 88: 5152-5164.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.