

Cat.# RP-655-SP Measles Virus Hemagglutinin Mosaic (1-30,115-150,379-410) peptide (>95%, no tag) Size:100 ug

Measles, also known as Rubeola or English measles (not to be confused with rubella or German measles, a different disease) or Morbilli, is an infection of the respiratory system caused by a virus, specifically a paramyxovirus of the genus Morbillivirus. Morbilliviruses, like other paramyxoviruses, are enveloped, single-stranded, negative-sense RNA viruses. Symptoms include fever, cough, runny nose, red eyes and a generalized, maculopapular, erythematous rash. Measles is spread through respiration (contact with fluids from an infected person's nose and mouth, either directly or through aerosol transmission), and is highly contagious—90% of people without immunity sharing living space with an infected person will catch it. The infection has an average incubation period of 14 days (range 6–19 days) and infectivity lasts from 2–4 days prior, until 2–5 days following the onset of the rash (i.e. 4–9 days infectivity in total).

Clinical diagnosis of measles requires a history of fever of at least three days together with at least one of the three C's (cough, coryza, conjunctivitis). Observation of Koplik's spots is also diagnostic of measles. Alternatively, laboratory diagnosis of measles can be done with confirmation of positive measles IgM antibodies or isolation of measles virus RNA from respiratory specimens. In children, where phlebotomy is inappropriate, saliva can be collected for salivary measles specific IgA test. Positive contact with other patients known to have measles adds strong epidemiological evidence to the diagnosis. The contact with any infected person in any way, including semen through sex, saliva, or mucus can cause infection.

In developed countries, most children are immunized against measles by the age of 18 months, generally as part of a three-part MMR vaccine (measles, mumps, and rubella). In developing countries where measles is highly endemic, the WHO recommend that two doses of vaccine be given at six months and at nine months of age. Vaccine efficacy can be measured by the number of reported cases in the USA. For measles, 894,134 cases reported in 1941 compared to 288 cases reported in 1995 resulted in a 99.97% decrease in reported cases; for mumps, 152,209 cases reported in 1968 compared to 840 cases reported in 1995 resulted in a 99.45% decrease in reported cases; and for rubella, 57,686 cases reported in 1969 compared to 200 cases reported in 1995 resulted in a 99.65% decrease

MMR II vaccine (Merck) is a live virus vaccine for vaccination against measles (rubeola), mumps, and rubella (German measles). Attenuated Measle virus, derived from Enders' attenuated Edmonston strain and propagated in chick embryo cell culture, is used in MMRII vaccine.

Source of Antigen and Antibodies

Measles virus mosaic synthetic peptide contains the large hemagglutinin immunodominant regions 1-30, 115-150 and 379-410 amino acids and purified (>95%). It is supplied in PBS azide (or see lot sp. conc on the vial).

Storage

Short-term: unopened, undiluted liquid vials at –20oC.

Long-term: at –20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20oC or below.

Recommended usage.

ELISA or Western or rapid test to detect antibodies to measles virus. Antigen concentration must be optimized for a given technique.

General References: WHO weekly epidemiological records, 2009; Fursue Y (2010) Virol. J. 7, 52; Parker A (2006) NEJM 355, 447-455
*This product is for in vitro research use only.

Related items from ADI...

Catalog#	Prod Description
MESL11-A	Anti-Measles (Rubeola/Edmonston strain) Virus IgG
MESL12-M	Monoclonal Anti-Measles (Rubeola/Edmonston strain) Virus IgG
MESL15-N-500	Measles (Rubeola) Virus (Edmonston) proteins/antigen extract
RP-1612	Recombinant (E.Coli) purified Measles virus Large Polymerase (2059-2183)
RP-1613	Recombinant (E.Coli) purified Measles virus Large Polymerase (58-149)
RP-651	Recombinant (E.Coli) Measles Virus Large Polymerase (58-149)
RP-653	Recombinant (E.Coli) Measles Virus Large Polymerase (2059-2183)
RP-655	Recombinant (E.Coli) Measles Virus Hemagglutinin Mosaic (1-30,115-150,379-410)
530-100-HMG	Human Anti-Measles IgG ELISA kit, 96 tests
530-110-HMM	Human Anti-Measles IgM ELISA kit, 96 tests
530-120-HMA	Human Anti-Measles IgA ELISA kit, 96 tests
530-130-MMG	Mouse Anti-Measles IgG ELISA kit, 96 tests, Quantitative
530-140-MMM	Mouse Anti-Measles IgM ELISA kit, 96 tests, Quantitative
530-150-MMA	Mouse Anti-Measles IgA ELISA kit, 96 tests, Quantitative

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