ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

Life Technologies™ Your Molecular & Cell Technology Partner

Measles (Rubeola/Edmonton strain) Virus antibodies

☐ Cat. # MESL15-N-500 Measles (Rubeola) Virus (Edmonston) proteins/antigen extract SIZE: 500 ul

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). Atenuated 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 (Rubeola, Edmonston strain) Virus is replicated in Vero cells. The viral antigens are extracted from lysed Vero cells using proprietary methods. The antigen preparation is partially purified to reduce host cell components and contains predominantly nucleocapsid antigens. The antigen is ultraviolet light inactivated and is tested for infectivity prior to release. The purification process yields a Rubeola antigen which has a high sensitivity and low background in the ELISA assay.

Typically, measles antigen are used for ELISA and rapid tests for the diagnosis of measles virus or the presence of antibodies in patients samples. Diagnosis can be made by acute and convalescent paired sera showing a four-fold increase in antibody titer to the Rubeola Virus antigen. Likewise, a single early serum sample can be used for the identification of Rubeola virus-specific IgM antibody.

Typical lot is ~1 mg/ml.

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.

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#	ProdDescription
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

Alpha Diagnostic Intl Inc., 6203 Woodlake Center Dr, San Antonio, TX 78244, USA; **Email**: service@4adi.com

India Contact:

Life Technologies (India) Pvt. Ltd.

306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444

Email: customerservice@lifetechindia.com Website: www.lifetechindia.com