Rubella Virus HA (711): sc-58014



The Power to Question

BACKGROUND

The Rubella Virus causes the disease Rubella (also known as epidemic roseola, German measles, liberty measles or three-day measles). It is spread via respiratory transmission from human to human, and the symptoms of the disease are often so mild that an attack can pass unnoticed, making diagnosis difficult. Rubella Virus contains three major structural polypeptides designated E1, E2, and C. E2 consists of three closely related glycopolypeptides, while both E1 and E2 are glycosylated and contain [3H] palmitic acid. Under nonreducing conditions, E1 exists as a disulfide-bonded dimer (E1-E1), a disulfidebounded heterodimer (E1-E2) and in its monomeric form (E1). E2 is found predominantly in heterodimeric form (E1-E2) and C is found only in dimeric form under non-reducing conditions. A peptide region of E1 (193 to 269) contains hemagglutinin (HA) and virus-neutralizing (VN) epitopes.

REFERENCES

- Waxham, M.N. and Wolinsky, J.S. 1985. A model of the structural organization of rubella virions. Rev. Infect. Dis. 7: S133-S139.
- Chaye, H., Chong, P., Tripet, B., Brush, B. and Gillam, S. 1992. Localization of of rubella virus. Virology 189: 483-492.
- Forng, R.Y. and Frey, T.K. 1995. Identification of the Rubella Virus nonstructural proteins. Virology 206: 843-853.
- Johnstone, P., Whitby, J.E., Bosma, T., Best, J.M. and Sanders, P.G. 1998.
 Sequence variation in 5' termini of Rubella Virus genomes: changes affecting structure of the 5' proximal stem-loop. Arch. Virol. 141: 2471-2477.
- Cordoba, P., Lanoel, A., Grutadauria, S. and Zapata, M. 2000. Evaluation of antibodies against a Rubella Virus neutralizing domain for determination of immune status. Clin. Diagn. Lab. Immunol. 7: 964-966.
- Liu, X., Yang, J., Ghazi, A.M. and Frey, T.K. 2000. Characterization of the zinc binding activity of the Rubella Virus nonstructural protease. J. Virol. 74: 5949-5956.
- 7. Qiu, Z., Yao, J., Cao, H. and Gillam, S. 2000. Mutations in the E1 hydrophobic domain of Rubella Virus impair virus infectivity but not virus assembly. J. Virol. 74: 6637-6642.
- 8. Law, L.J., Ilkow, C.S., Tzeng, W.P., Rawluk, M., Stuart, D.T., Frey, T.K. and Hobman, T.C. 2006. Analyses of phosphorylation events in the Rubella Virus capsid protein: role in early replication events. J. Virol. 80: 6917-6925.
- Saitoh, M., Shinkawa, N., Shimada, S., Segawa, Y., Sadamasu, K., Kato, M., Hasegawa, M., Kozawa, K., Kuramoto, T., Nishio, O. and Kimura, H. 2006. Phylogenetic analysis of envelope glycoprotein (E1) gene of Rubella Viruses prevalent in Japan in 2004. Microbiol. Immunol. 50: 179-185.

SOURCE

Rubella Virus HA (711) is a mouse monoclonal antibody raised against purified whole Rubella Virus.

STORAGE

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

PRODUCT

Each vial contains 100 $\mu g\ lgG_1$ in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Rubella Virus HA (711) is recommended for detection of Rubella Virus HA by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

RESEARCH USE

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

PROTOCOLS

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