SANTA CRUZ BIOTECHNOLOGY, INC.

Rubella Virus structural glycoprotein (Ru6): sc-52203



The Power to Ouestin

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 disulfide-bounded 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) conatins 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: S133-139.
- 2. Forng, R.Y. and Frey, T.K. 1995. Identification of the Rubella Virus nonstructural proteins. Virology 206: 843-853.
- 3. 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.
- 4. 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.
- 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.
- 7. Risco, C., Carrascosa, J.L. and Frey, T.K. 2003. Structural maturation of Rubella Virus in the Golgi complex. Virology 312: 261-269.
- 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., Hasegawa, M., Kato, 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 structural glycoprotein (Ru6) is a mouse monoclonal antibody raised against purified Rubella virus, strain HPV72.

PRODUCT

Each vial contains 100 μg lgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Rubella Virus structural glycoprotein (Ru6) is recommended for detection of structural glycoprotein E1 of Rubella virus of Rubella Virus origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Molecular Weight of Rubella Virus structural glycoprotein: 58 kDa.

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.

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