

Marburg Virus (FM44): sc-52069

BACKGROUND

Marburg Virus (MBG) represents one of the least known of the hemorrhagic fever-causing viruses worldwide. It is a member of the *Filoviridae* family of RNA-containing viruses. Marburg Virus has long threadlike particles that vary greatly in length with a range of 800 nm up to 14,000 nm. It is an exceptionally dangerous pathogen that causes a contagious and highly lethal febrile disease and hemorrhagic syndrome called Marburg haemorrhagic fever.

Victims experience a high fever, diarrhea, vomiting and severe bleeding from bodily orifices, and usually die within one week. For a patient who does survive, recovery is prolonged and usually includes inflammation or infection of various organs, including the testicles, liver, spinal cord, eyes and/or salivary glands. Both the disease and the virus are related to Ebola and originated in the same part of Africa.

REFERENCES

1. Sanger, C., Muhlberger, E., Klenk, H.D. and Becker, S. 2001. Adverse effects of MVA-T7 on the transport of Marburg Virus glycoprotein. *J. Virol. Methods* 91: 29-35.
2. Razumov, I.A., Belanov, E.F., Bormotov, N.I. and Kazachinskaia, E.I. 2001. Detection of antiviral activity of monoclonal antibodies, specific to Marburg Virus proteins. *Vopr. Virusol.* 46: 33-37.
3. Sanger, C., Muhlberger, E., Lotfering, B., Klenk, H.D. and Becker, S. 2002. The Marburg Virus surface protein GP is phosphorylated at its ectodomain. *Virology* 295: 20-29.
4. Sorokin, A.V., Kazachinskaia, E.I., Ivanova, A.V., Kachko, A.V., Netesov, S.V., Bukreyev, A.A., Loktev, V.B. and Razumov, I.A. 2002. Mapping of two dominant sites of VP35 of Marburg Virus. *Viral Immunol.* 15: 481-492.
5. Hevey, M., Negley, D. and Schmaljohn, A. 2003. Characterization of monoclonal antibodies to Marburg Virus (strain Musoke) glycoprotein and identification of two protective epitopes. *Virology* 314: 350-357.
6. Morikawa, S. 2003. Ebola virus and Marburg Virus. *Nippon Rinsho* 3: 544-549.
7. Kolesnikova, L., Bamberg, S., Berghofer, B. and Becker, S. 2004. The matrix cellular membranes: exploiting the retrograde late endosomal pathway. *J. Virol.* 78: 2382-2393.
8. Bamberg, S., Kolesnikova, L., Moller, P., Klenk, H.D. and Becker, S. 2005. VP24 of Marburg Virus influences formation of infectious particles. *J. Virol.* 79: 13421-13433.
9. Peterson, A.T., Lash, R.R., Carroll, D.S. and Johnson, K.M. 2006. Geographic potential for outbreaks of Marburg hemorrhagic fever. *Am. J. Trop. Med. Hyg.* 75: 9-15.

SOURCE

Marburg Virus (FM44) is a mouse monoclonal antibody raised against purified and inactivated Marburg virus.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Marburg Virus (FM44) is recommended for detection of high molecular weight material under non-reducing conditions and 30K protein band under reducing conditions of Marburg Virus origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Molecular Weight of Marburg Virus: 30 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.