



## Bunyavirus (3591): sc-58098

### BACKGROUND

*Bunyaviridae* represents a family of negative-stranded RNA viruses that mainly infect arthropods or rodents, though certain viruses in this family can be found in humans. Bunyaviruses have tripartite genomes that include a large segment that encodes for the RNA-polymerase, a medium segment that encodes for the viral glycoproteins which project from the viral surface and aid the virus in attaching to and entering the host cell, and a small segment that encodes for the nucleocapsid protein. Bunyavirus RNA replicates in the host cytoplasm and the viral proteins are transported through the ER and Golgi apparatus and eventually to the cell surface. Human infections with certain Bunyaviruses, such as Crimean-Congo Hemorrhagic Fever virus, are dangerous and associated with high levels of morbidity and mortality.

### REFERENCES

1. Morales-Betoulle, M.E., Contamin, H., Barnaud, A. and Talarmin, A. 2001. Use of the squirrel monkey *Saimiri sciureus* to optimize serological tests for diagnosis of Bunyavirus infection in humans. *J. Virol. Methods* 93: 57-64.
2. Bowen, M.D., Trappier, S.G., Sanchez, A.J., Meyer, R.F., Goldsmith, C.S., Zaki, S.R., Dunster, L.M., Peters, C.J., Ksiazek, T.G. and Nichol, S.T. 2002. A reassortant Bunyavirus isolated from acute hemorrhagic fever cases in Kenya and Somalia. *Virology* 291: 185-190.
3. Kariwa, H. 2002. Bunyavirus—virus and host relationship: the coevolution between hantavirus and rodent. *Uirusu* 52: 61-67.
4. Kono, Y., Yusnita, Y., Mohd Ali, A.R., Maizan, M., Sharifah, S.H., Fauzia, O., Kubo, M. and Aziz, A.J. 2002. Characterization and identification of Oya virus, a Simbu serogroup virus of the genus Bunyavirus, isolated from a pig suspected of Nipah virus infection. *Arch. Virol.* 147: 1623-1630.
5. Barr, J.N. and Wertz, G.W. 2004. Bunyamwera bunyavirus RNA synthesis requires cooperation of 3'- and 5'-terminal sequences. *J. Virol.* 78: 1129-1138.
6. Lowen, A.C., Noonan, C., McLees, A. and Elliott, R.M. 2004. Efficient Bunyavirus rescue from cloned cDNA. *Virology* 330: 493-500.
7. Lowen, A.C., Boyd, A., Fazakerley, J.K. and Elliott, R.M. 2005. Attenuation of Bunyavirus replication by rearrangement of viral coding and noncoding sequences. *J. Virol.* 79: 6940-6946.
8. Mir, M.A. and Panganiban, A.T. 2006. The Bunyavirus nucleocapsid protein is an RNA chaperone: possible roles in viral RNA panhandle formation and genome replication. *RNA* 12: 272-282.
9. Leonard, V.H., Kohl, A., Hart, T.J. and Elliott, R.M. 2006. Interaction of Bunyamwera Orthobunyavirus NSs protein with mediator protein MED8: a mechanism for inhibiting the interferon response. *J. Virol.* 80: 9667-9675.

### SOURCE

Bunyavirus (3591) is a mouse monoclonal antibody raised against Bunyavirus.

### RESEARCH USE

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

### PRODUCT

Each vial contains 100 µg IgG<sub>2a</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

### APPLICATIONS

Bunyavirus (3591) is recommended for detection of a broad range of members of the Bunyavirus group including the LaCrosse virus of Bunyavirus origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

### STORAGE

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

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.