



Rabies Virus (RV1C5): sc-57995

BACKGROUND

Rabies Virus (neurotropic lyssavirus) is a member of the *Rhabdoviridae* family. Rabies is a single stranded, neurotropic, negative sense RNA virus whose genome encodes five proteins: a glycoprotein, a nucleoprotein and three other proteins. The mature virus is bullet shaped and has a protein coat with a lipid envelope. The outer surface of the virus is covered with thumb-like glycoprotein projections that are 5-10 nm long and 3 nm in diameter. The length of the virus averages approximately 780 nm. The ability of the Rabies Virus to infect hosts is destroyed by lipid solvents. Rabies is a very successful virus, with a broad range of susceptible hosts. Rabies Virus causes an acute central nervous system infection, characterized by CNS irritation, followed by paralysis and death. Approximately 50,000 human deaths each year are caused by Rabies Virus.

REFERENCES

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2. Lodmell, D.L., Ray, N.B., Ulrich, J.T. and Ewalt, L.C. 2000. DNA vaccination of mice against Rabies Virus: effects of the route of vaccination and the adjuvant monophosphoryl lipid A (MPL). *Vaccine* 18: 1059-1066.
3. Schuster, P., Müller, T., Vos, A., Selhorst, T., Neubert, L. and Pommerening, E. 2001. Comparative immunogenicity and efficacy studies with oral Rabies Virus vaccine SAD P5/88 in raccoon, dogs and red foxes. *Acta Vet. Hung.* 49: 285-290.
4. Johnson, N., Mansfield, K.L. and Fooks, A.R. 2002. Canine vaccine recipients recognize an immunodominant region of the Rabies Virus glycoprotein. *J. Gen. Virol.* 83: 2663-2669.
5. Aguilar-Setien, A., Aguila-Tecuatl, H., Tesoro-Cruz, E., Ramos-Ramírez, L. and Kretschmer, R.S. 2004. Preservation of Rabies Virus RNA from brain tissue using glycerine. *Trans. R. Soc. Trop. Med. Hyg.* 97: 547-549.
6. Cardoso, T. and Pilz, D. 2004. Wild Rabies Virus detection by plaque assay from naturally infected brains in different species. *Vet. Microbiol.* 103: 161-167.
7. Morimoto, K., Shoji, Y. and Inoue, S. 2005. Characterization of P gene-deficient Rabies Virus: propagation, pathogenicity and antigenicity. *Virus Res.* 111: 61-67.
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9. Weli, S.C., Scott, C.A., Ward, C.A. and Jackson, A.C. 2006. Rabies Virus infection of primary neuronal cultures and adult mice: failure to demonstrate evidence of excitotoxicity. *J. Virol.* 80: 10270-10273.

SOURCE

Rabies Virus (RV1C5) is a mouse monoclonal antibody raised against purified Rabies Virus.

RESEARCH USE

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

PRODUCT

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

APPLICATIONS

Rabies Virus (RV1C5) is recommended for detection of a glycoprotein of Rabies Virus by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of Rabies Virus: 190 kDa.

SELECT PRODUCT CITATIONS

1. Picotto, L.D., Sguazza, G.H., Tizzano, M.A., Galosi, C.M., Cavalitto, S.F. and Pecoraro, M.R. 2017. An effective and simplified DO-stat control strategy for production of Rabies glycoprotein in *Pichia pastoris*. *Protein Expr. Purif.* 132: 124-130.
3. Park, J.E. and Shin, H.J. 2021. Immunogenicity of replication-deficient vesicular stomatitis virus based rabies vaccine in mice. *Vet. Q.* E-published.

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 for detailed protocols and support products.