

Dengue Virus (9.F.10): sc-70959

BACKGROUND

Dengue Virus, a member of the genus *Flavivirus* and family *Flaviviridae*, causes Dengue fever, the acute febrile disease found in the tropics. This infectious disease is characterized by a sudden onset of fever with severe headache, muscle and joint pains, and rashes, and lasts about six to seven days. Dengue Virus is transmitted to humans via mosquitos. The Dengue Virus genome is a single-stranded positive-sense RNA that encodes three structural proteins (capsid, membrane, and envelope) and seven nonstructural proteins (NS1, NS2A, NS2B, NS3, NS4A, NS4B and NS5). Four serotypes of the Dengue Virus exist: Dengue Virus 1, 2, 3 and 4. Dengue Virus 1 represents a unique strain that first appeared in 1987.

REFERENCES

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- Serufo, J.C., et al. 1993. Isolation of Dengue Virus type 1 from larvae of *Aedes albopictus* in Campos Altos city, State of Minas Gerais, Brazil. *Mem. Inst. Oswaldo Cruz* 88: 503-504.
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- Santos, C.L., et al. 2004. Molecular analysis of the Dengue Virus type 1 and 2 in Brazil based on sequences of the genomic envelope-nonstructural protein 1 junction region. *Rev. Inst. Med. Trop. Sao Paulo* 46: 145-152.
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SOURCE

Dengue Virus (9.F.10) is a mouse monoclonal antibody raised against Dengue Virus serotypes 1, 2, 3 and 4.

PRODUCT

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

STORAGE

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

APPLICATIONS

Dengue Virus (9.F.10) is recommended for detection of Dengue Virus 1, 2, 3 and 4 origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of Dengue Virus: 61 kDa.

SELECT PRODUCT CITATIONS

- Zhang, M., et al. 2010. Quantitative analysis of replication and tropisms of Dengue Virus type 2 in *Aedes albopictus*. *Am. J. Trop. Med. Hyg.* 83: 700-707.
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- Chanthick, C., et al. 2016. Caveolae-mediated albumin transcytosis is enhanced in Dengue-infected human endothelial cells: a model of vascular leakage in Dengue hemorrhagic fever. *Sci. Rep.* 6: 31855.
- Ji, M., et al. 2019. An antiviral peptide from *Alopecosa nagpaz* spider targets NS2B-NS3 protease of flaviviruses. *Toxins* 11: 584.
- Wollner, C.J., et al. 2021. A Dengue Virus serotype 1 mRNA-LNP vaccine elicits protective immune responses. *J. Virol.* 95: e02482-20.

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.