SANTA CRUZ BIOTECHNOLOGY, INC.

Yellow Fever (3576): sc-58083

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Yellow Fever (also known as yellow jack, or American Plague) is acquired through an arbovirus of the family Flaviviridae. A tropical disease identified by high fever, jaundice, heart and kidney failure, and haemorrhagic diathesis, the Yellow Fever Virus is one of the smallest RNA viruses isolated. Human infection initiates only after an infected arthropod, regularly a mosquito, deposits viral particles through the skin. After infection, the virus initiates replication locally, succeeded by transportation to the rest of the body via the lymphatic system. Following the infection of the lymphatic system, the virus proceeds to establish itself throughout organ systems, including the adrenal glands, kidneys, heart, and the parenchyma of the liver. During infection, necrotic masses known as Councilman bodies appear in the cytoplasm of hepatocytes indicating high viral loads are also present in the blood. Molecular epidemiologic data suggests there are seven different genotypes of Yellow Fever Virus that are separated geographically. Outbreaks of the disease are coorelated with particular genotypes.

REFERENCES

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2. 2006. Yellow Fever situation in Africa and South America, 2005. Wkly. Epidemiol. Rec. 81: 317-324.
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4. Krockel, U., et al. 2006. New tools for surveillance of adult Yellow Fever mosquitoes: comparison of trap catches with human landing rates in an urban environment. J. Am. Mosq. Control Assoc. 22: 229-238.
5. Roukens, A.H. and Visser, L.G. 2006. The risk of Yellow Fever in travellers. Ned. Tijdschr. Geneeskd. 150: 1815-1820.
6. McElroy, K.L., et al. 2006. Role of the Yellow Fever Virus structural protein genes in viral dissemination from the *Aedes aegypti* mosquito midgut. J. Gen. Virol. 87: 2993-3001.
7. Palmer, D.R., et al. 2007. Restricted replication and lysosomal trafficking of Yellow Fever 17D vaccine virus in human Dendritic cells. J. Gen. Virol. 88: 148-156.
8. Barrett, A.D. and Higgs, S. 2007. Yellow Fever: a disease that has yet to be conquered. Annu. Rev. Entomol. 52: 209-229.

SOURCE

Yellow Fever (3576) is a mouse monoclonal antibody raised against a Yellow Fever cell preparation.

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

Yellow Fever (3576) is recommended for detection of Yellow Fever of Yellow Fever Virus origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other Flaviviruses.

SELECT PRODUCT CITATIONS

1. Carrano, A.C. and Pagano, M. 2001. Role of the F-box protein Skp2 in adhesion-dependent cell cycle progression. J. Biol. Chem. 153: 1381-1390.
2. Katzenell, S. and Leib, D.A. 2016. Herpes simplex virus and interferon signaling induce novel autophagic clusters in sensory neurons. J. Virol. 90: 4706-4719.
3. Hernandez, N., et al. 2019. Inherited IFNAR1 deficiency in otherwise healthy patients with adverse reaction to measles and Yellow Fever live vaccines. J. Exp. Med. 216: 2057-2070.
4. Brown, R.J.P., et al. 2020. Liver-expressed Cd302 and Cr1l limit hepatitis C virus cross-species transmission to mice. Sci. Adv. 6: eabd3233.
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6. Hoffmann, H.H., et al. 2021. TMEM41B is a pan-flavivirus host factor. Cell 184: 133-148.e20.

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.