

Alphavirus (3582): sc-293153

BACKGROUND

Alphavirus is a member of the group IV Togaviridae family of viruses that all have a positive sense single stranded RNA genome. Alphaviruses are enveloped with a 70 nm diameter, and they tend to be spherical in shape. The Alphavirus genome encodes for structural proteins Capsid protein C, Envelope glycoprotein E1, Envelope glycoprotein E2 and Envelope glycoprotein E3, as well as nonstructural proteins that are used during transcription and replication of viral RNA. Alphavirus infection in humans is characterized by arthritis, encephalitis, rashes and fever. Alphaviruses are useful in research as they are easily engineered to create replicon vectors which efficiently induce humoral and T cell immune responses. They may play a role in vaccinations against viral, bacterial, protozoan and tumour antigens.

REFERENCES

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SOURCE

Alphavirus (3582) is a mouse monoclonal antibody raised against Alphavirus preparation.

PRODUCT

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

RESEARCH USE

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

APPLICATIONS

Alphavirus (3582) is recommended for detection of Eastern and Western Equine Encephalitis, VEE, Semliki and Chikungunya Alphavirus strains by solid phase ELISA (starting dilution 1:20, dilution range 1:20-1:200).

SELECT PRODUCT CITATIONS

1. Okabayashi, T., Sasaki, T., Masrinoul, P., Chantawat, N., Yoksan, S., Nitatpattana, N., Chusri, S., Morales Vargas, R.E., Grandadam, M., Brey, P.T., Soegijanto, S., Mulyantno, K.C., Churrotin, S., et al. 2015. Detection of chikungunya virus antigen by a novel rapid immunochromatographic test. *J. Clin. Microbiol.* 53: 382-388.
2. Septembre-Malaterre, A., Bedoui, Y., Giry, C., Gasque, P., Guiraud, P. and Sélambarom, J. 2021. Quercetin can reduce viral RNA level of O'nyong-nyong virus and resulting innate immune cytokine responses in cultured human synovial fibroblasts. *Sci. Rep.* 11: 6369.
3. Singh, V.A., Kumar, C.S., Khare, B., Kuhn, R.J., Banerjee, M. and Tomar, S. 2022. Surface decorated reporter-tagged chikungunya virus-like particles for clinical diagnostics and identification of virus entry inhibitors. *Virology* 578: 92-102.

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.