SANTA CRUZ BIOTECHNOLOGY, INC.

HSV-1/2 gE Envelope Protein (0112): sc-58153

BACKGROUND

Two serotypes of the herpes simplex virus, HSV-1 (also known as type 1 or oral) and HSV-2 (type 2 or genital), can establish lifelong latent infections within sensory ganglia. HSV-1 usually establishes latency in the trigeminal ganglion, a collection of nerve cells near the ear. From there, it tends to recur on the lower lip or face. HSV-2 usually resides in the sacral ganglion at the base of the spine. From there, it reiterates in the genital area. When no symptoms are present, HSV lies dormant in the bodies of the nerve cells. During an outbreak, though, it replicates within axons near the skin. Once the outbreak subsides, the virus then retreats along the nerve until it remains only in the nerve body. The envelope of HSV consists of glycoproteins derived from the viral genome. The envelope is derived from portions of host cell membranes. Envelope proteins are embedded into the membranous viral envelope to allow host cell recogntion through the identification and binding of host cell receptor sites. >Glycoprotein E (HSV-2 gE Envelope Protein) may contribute to viral entry.

REFERENCES

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2. Löwhagen, G.B., et al. 2006. The microenvironment of vulvar skin in women with symptomatic and asymptomatic herpes simplex virus type 2 (HSV-2) infection. J. Eur. Acad. Dermatol. Venereol. 20: 1086-1089.
3. Chu, K., et al. 2006. Association between HSV-2 and HIV-1 viral load in semen, cervico-vaginal secretions and genital ulcers of Thai men and women. Int. J. STD AIDS 17: 681-686.
4. Margolis, T.P., et al. 2007. Herpes simplex virus type 2 (HSV-2) establishes latent infection in a different population of ganglionic neurons than HSV-1: role of latency-associated transcripts. J. Virol. 81: 1872-1878.
5. Golembewski, E.K., et al. 2007.The HSV-2 protein ICP10PK prevents neuronal apoptosis and loss of function in an *in vivo* model of neurodegeneration associated with glutamate excitotoxicity. Exp. Neurol. 203: 381-393.
6. Iqbal, J., et al. 2007. Development and validation of a capillary electrophoresis method for the characterization of herpes simplex virus type 1 (HSV-1) thymidine kinase substrates and inhibitors. J. Chromatogr. B Analyt. Technol. Biomed. Life Sci. 846: 281-290.
7. Haddow, L.J., et al. 2007. Herpes simplex virus type 2 (HSV-2) infection in women attending an antenatal clinic in the south pacific island nation of Vanuatu. Sex. Transm. Dis. 34: 258-261.
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9. Legoff, J., et al. 2007. HSV-2- and HIV-1- permissive cell lines co-infected by HSV-2 and HIV-1 co-replicate HSV-2 and HIV-1 without production of HSV-2/HIV-1 pseudotype particles. Virol. J. 4: 2.

SOURCE

HSV-1/2 gE Envelope Protein (0112) is a mouse monoclonal antibody raised against herpes simplex virus.

PRODUCT

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

APPLICATIONS

HSV-1/2 gE Envelope Protein (0112) is recommended for detection of gE of HSV-1 origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

SELECT PRODUCT CITATIONS

1. Suenaga, T., et al. 2014. Engineering large viral DNA genomes using the CRISPR-Cas9 system. Microbiol. Immunol. 58: 513-522.

STORAGE

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

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.