SANTA CRUZ BIOTECHNOLOGY, INC.

HSV-1/2 gD (H170): sc-69802

BACKGROUND

Membrane fusion is crucial for the entry, spread and formation of enveloped viruses, such as herpes simplex virus, and is mediated by envelope glycoproteins. Two serotypes of the herpes simplex virus, HSV-1 (also known as type 1 or oral) and HSV-2 (type 2 or genital), have been shown to encode at least ten glycoproteins, four of which are necessary and sufficient to facilitate fusion. These four glycoproteins include glycoprotein B (gB), glycoprotein D (gD), glycoprotein H(gH) and glycoprotein L (gL). The fusion event is dependent upon the expression of a gD receptor on target cell membranes and does not require the presence of cell-surface glycosaminoglycans. HSV-1/2 gD (glycoprotein D) specifically allows a stabile connection to cellular receptors. Late adsorption to host cell membranes is correlated to a conformation change of gD occurring after receptor binding, followed by interaction of gD with the gH/gL heterodimer.

REFERENCES

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2. Bystricka, M. et al. 1991. Type-common and type-specific monoclonal antibodies to herpes simplex virus types 1 and 2. Acta Virol. 35: 152-164.
3. Slomka, M.J. 1996. Seroepidemiology and control of genital herpes: the value of type-specific antibodies to herpes simplex virus. Commun. Dis. Rep. CDR Rev. 6: R41-R45.
4. Bystricka, M. et al. 1997. Monoclonal antibodies to the distinct antigenic sites on glycoproteins C and B and their protective abilities in herpes simplex virus infection. Acta Virol. 41: 5-12.
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SOURCE

HSV-1/2 gD (H170) is a mouse monoclonal antibody raised against gD of HSV-2 strain G.

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 gD (H170) is recommended for detection of gD, also designated glycoprotein D, of HSV-1 and HSV-2 origin 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 HSV-1/2 gD: 59 kDa.

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.

SELECT PRODUCT CITATIONS

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