## SANTA CRUZ BIOTECHNOLOGY, INC.

# HSV-2 (1.B.46): sc-71284



#### 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. Periodically, the virus reactivates and can cause recurrent cold sores, ence-phalitis and eye and genital infections. 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. HSV-2 specifically infects the genitals, and the virus can be shed from the skin in the absence of symptoms. In fact, an estimated 50% and 80% of new HSV-2 cases are from asymptomatic viral shedding. All herpes viruses are morphologically identical: they have a large double stranded DNA genome. The virion consists of an icosahedral nucleocapsid which is surrounded by a lipid bilayer envelope. Between the capsid and the envelope is an amorphous layer of proteins, termed the tegument. Following primary infection, the virus establishes a latent infection in the host and may reactivate at any stage. Reactivation is frequently, but not always, associated with further disease.

### REFERENCES

- Dinn, J.J. 1981. Transolfactory spread of virus in herpes simplex encephalitis. Br. Med. J. 281: 1392.
- Nahmias, A.J. 2002. Routine use of HSV-1 and HSV-2 antibody testing. Herpes 9: 83.
- Parr, M.B. and Parr, E.L. 2003. Vaginal immunity in the HSV-2 mouse model. Int. Rev. Immunol. 22: 43-63.
- Peretti, S., Shaw, A., Pope, M., Blanchard, J., Bohm, R., Morrow, G., Lifson, J.D. and Gettie, A. 2005. Immunomodulatory effects of HSV-2 infection on immature macaque dendritic cells modify innate and adaptive responses. Blood 106: 1305-1313.
- 5. Ando, Y. 2006. Diagnosis of HSV-1, HSV-2 infection. Nippon Rinsho 3: 226-229.
- Austin, B.A., James, C.M., Härle, P. and Carr, D.J. 2006. Direct application of plasmid DNA containing type I interferon transgenes to vaginal mucosa inhibits HSV-2 mediated mortality. Biol. Proced. Online 8: 55-62.
- Kim, H.N., Meier, A., Huang, M.L., Kuntz, S., Selke, S., Celum, C., Corey, L. and Wald, A. 2006. Oral herpes simplex virus type 2 reactivation in HIVpositive and -negative men. J. Infect. Dis.194: 420-427.
- Löwhagen, G.B., Bonde, E., Forsgren-Brusk, U., Runeman, B. and Tunbäck, P. 2006. The microenvironment of vulvar skin in women with symptomatic herpes simplex virus type 2 (HSV-2) infection. J. Eur. Acad Dermatol. Venereol. 20: 1086-1089.
- Ramasamy, K., Lim, Z.Y., Savvas, M., Salisbury, J.R., Dokal, I., Mufti, G.J. and Pagliuca, A. 2006. Disseminated herpes virus (HSV-2) infection with rhabdomyolysis and hemophagocytic lymphohistiocytosis in a patient with bone marrow failure syndrome. Ann. Hematol. 85: 629-360.

## SOURCE

HSV-2 (1.B.46) is a mouse monoclonal antibody raised against purified HSV strain BH.

#### PRODUCT

Each vial contains 200  $\mu g~lgG_1$  in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

#### **APPLICATIONS**

HSV-2 (1.B.46) is recommended for detection of HSV type 2 of Herpes simplex virus origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

#### **STORAGE**

Store at 4° C, \*\*D0 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.