SANTA CRUZ BIOTECHNOLOGY, INC.

HSV-2 gG Envelope Protein (8.F.141): sc-57861

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The Power to Question

BACKGROUND

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. A characteristic of all herpesviruses is that, 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. HSV2 is usually associated with genital lesions. Specifically, Glycoprotein G is cleaved to a secreted amino-terminal portion and to a cell-associated, heavily O-glycosylated carboxy-terminal portion that constitutes the mature gG-2. This mature gG-2 is commonly used as a type-specific antigen in the serodiagnosis of HSV-2 infection.

REFERENCES

1. 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.
2. Parkes, D.L., et al. 1991. Seroreactive recombinant herpes simplex virus type 2-specific Glycoprotein G. J. Clin. Microbiol. 29: 778-781.
3. 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.
4. Bystricka, M., et al. 1998. Antibody responses to the herpes simplex virus type 2 Glycoprotein G in sera of human immunodeficiency virus-infected patients in Slovakia. Acta. Virol. 42: 319-324.
5. Bystricka, M., et al. 1999. Monoclonal antibodies suitable for type-specific identification of herpes simplex viruses by a rapid culture assay. Acta. Virol. 43: 399-402.
6. Liljeqvist, J.A., et al. 2000. Conservation of type-specific B-cell epitopes of Glycoprotein G in clinical herpes simplex virus type 2 isolates. J. Clin. Microbiol. 38: 4517-4522.

SOURCE

HSV-2 gG Envelope Protein (8.F.141) is a mouse monoclonal antibody raised against HSV-2 gG.

PRODUCT

Each vial contains 100 µg IgG1 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

HSV-2 gG Envelope Protein (8.F.141) is recommended for detection of Glycoprotein G Envelope Protein of Herpes Simplex Virus 2 origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1–2 µg per 100–500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of HSV-2 gG Envelope Protein: 92 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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