

HSV-1/2 VP22 (vC-20): sc-21850

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, eye and genital infections, and encephalitis. The VP22 protein of herpes simplex virus type 2 (HSV-2) is a major component of the virion tegument. The tegument protein VP22 and the viral dUTPase, encoded by genes UL49 and UL50, respectively, are T-cell antigens. VP16 is another tegument protein associated with VP22. The UL49 gene product (VP22) of herpes simplex virus types 1 and 2 (HSV-1 and HSV-2) is a virion phosphoprotein which accumulates inside infected cells at late stages of infection. VP22 found in infected cells is distributed in at least three distinct subcellular localizations, which are defined as cytoplasmic, diffuse, and nuclear, as measured by indirect immunofluorescence. VP22 exists predominantly in the cytoplasm early in infection and accumulates in the nucleus late in infection. Additionally, VP22 is phosphorylated during infection, and phosphorylation may play a role in modulating VP22 localization in infected

REFERENCES

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3. Pomeranz, L.E. and Blaho, J.A. 1999. Modified VP22 localizes to the cell nucleus during synchronized herpes simplex virus type 1 infection. *J. Virol.* 73: 6769-6781.
4. Koelle, D.M., Schomogyi, M., McClurkan, C., Reymond, S.N. and Chen, H.B. 2000. CD4 T-cell responses to herpes simplex virus type 2 major capsid protein VP5: comparison with responses to tegument and envelope glycoproteins. *J. Virol.* 74: 11422-11425.
5. Geiss, B.J., Tavis, J.E., Metzger, L.M., Leib, D.A. and Morrison, L.A. 2001. Temporal regulation of herpes simplex virus type 2 VP22 expression and phosphorylation. *J. Virol.* 75: 10721-10729.

SOURCE

HSV-1/2 VP22 (vC-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of VP22 of HSV-1 origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-21850 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

HSV-1/2 VP22 (vC-20) is recommended for detection of VP22 of HSV-1 and HSV-2 origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

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