SANTA CRUZ BIOTECHNOLOGY, INC.

VZV IE62 (vC-20): sc-17525

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Varicella-zoster virus (VZV), known as human herpesvirus-3 (HHV-3), is associated with two distinct diseases: childhood chickenpox (varicella) and shingles (zoster). VZV becomes dormant in sensory ganglia and may reactivate decades later to produce zoster (shingles) or herpes zoster. VZV is enveloped in the trans-Golgi network (TGN). VZV immediate-early (IE) proteins are intracellular regulators of viral gene expression. The viral encoded proteins, IE62 and IE63 are found in large amounts in infected cells, but are also components of the virion tegument. The gene product of the putative immediate early gene IE62, otherwise known as ORF62, plays a pivotal role in activating VZV genes of all three putative kinetic classes, namely immediate early (α), early (β), and late (γ) classes of VZV genes. The IE62 protein function is tightly regulated by phosphorylation mediated by protein kinases encoded by the virus. IE62 is also required for efficient binding of the TATA-binding protein and TAF130 to the gI promoter.

REFERENCES

1. Perera, L.P., Mosca, J.D., Sadeghi-Zadeh, M., Ruyechan, W.T. and Hay, J. 1992. The varicella-zoster virus immediate early protein, IE62, can positively regulate its cognate promoter. Virology 1: 346-354.
2. Kleinschmidt-DeMasters, B.K. and Gilden, D.H. 2001. Varicella-zoster virus infections of the nervous system: clinical and pathologic correlates. Arch. Pathol. Lab. Med. 6: 770-780.
3. Wang, Z.H., Gershon, M.D., Lungu, O., Zhu, Z., Mallory, S., Arvin, A.M. and Gershon, A.A. 2001. Essential role played by the C-terminal domain of gI in envelopment of varicella-zoster virus in the trans-Golgi network: interactions of glycoproteins with tegument. J. Virol. 1: 323-340.
4. Sadzot-Delvaux, C. and Rentier, B. 2001. The role of varicella zoster virus immediate-early proteins in latency and their potential use as components of vaccines. Arch. Virol. Suppl. 17: 81-89.
5. Kress, M. and Fickenscher, H. 2001. Infection by human varicella-zoster virus confers norepinephrine sensitivity to sensory neurons from rat dorsal root ganglia. FASEB J. 6: 1037-1043

SOURCE

VZV IE62 (vC-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of IE62 of varicella-zoster virus (VZV), also designated HHV-3, 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-17525 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

VZV IE62 (vC-20) is recommended for detection of IE62 of VZV/HHV-3 origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) 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.

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.