## SANTA CRUZ BIOTECHNOLOGY, INC.

# VZV gH (6A6): sc-56996



BACKGROUND

Varicella-zoster virus, known as VZV, 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). Glycoprotein I (gI) is required within the TGN for VZV envelopment, and for efficient membrane fusion during VZV replication. gE is a major component of the virion envelope and can be found complexed with glycoprotein I on the infected host cell surface. VZV glycoprotein B (gB) contains three consensus internalization motifs within its cytoplasmic domain. VZV glycoprotein H (gH) forms a comples with glycoprotein L (gL) in infected cells and, together, they may be involved in pathogenesis.

#### REFERENCES

- Kimura, H., Straus, S.E. and Williams, R.K. 1997. Varicella Zoster Virus glycoproteins E and I expressed in insect cells form a heterodimer that requires the N-terminal domain of glycoprotein I. Virology 2: 382-391.
- Cohen, J.I. and Nguyen, H. 1997. Varicella Zoster Virus glycoprotein I is essential for growth of virus in Vero cells. J. Virol. 71: 6913-6920.
- Mallory, S., Sommer, M. and Arvin, A.M. 1997. Mutational analysis of the role of glycoprotein I in Varicella Zoster Virus replication and its effects on glycoprotein E conformation and trafficking. J. Virol. 71: 8279-8288.
- Rahaus, M. and Wolff, M.H. 2000. Transcription factor Sp1 is involved in the regulation of Varicella Zoster Virus glycoprotein E. Virus Res. 1: 69-81.
- 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.
- 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 glycoprotein I in envelopment of Varicella Zoster Virus in the *trans*-Golgi network: interactions of glycoproteins with tegument. J. Virol. 75: 323-340.
- Heineman, T.C. and Hall, S.L. 2001. VZV gB endocytosis and Golgi localization are mediated by YXXφ motifs in its cytoplasmic domain. Virology 285: 42-49.

## SOURCE

VZV gH (6A6) is a mouse monoclonal antibody raised against VZV infected cell extract.

## PRODUCT

Each vial contains 100  $\mu g~lg G_1$  in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

#### **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.

### APPLICATIONS

VZV gH (6A6) is recommended for detection of VZV glycoprotein H by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

#### **PROTOCOLS**

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