



## HHV-8 K8.1A (2A3): sc-65445

### BACKGROUND

HHV-8, also designated Kaposi's sarcoma-associated herpesvirus, is associated with multicentric Castlemann's disease and primary effusion lymphoma, a rare type of non-Hodgkin lymphoma affecting the body cavities. The HHV-8 K8.1 gene encodes for two immunogenic/lytic glycoproteins that are generated by a splicing event: K8.1A and K8.1B. K8.1A is the predominant form associated with the virion envelope and is comprised of 228 residues. This protein consists of a cleavable signal sequence, a transmembrane domain, O-glycosylation sites and four N-glycosylation sites. Evidence suggests that K8.1A interacts with heparan sulfate (HS) molecules on the surface of target cells and could mediate HHV-8 interaction with HS. The K8.1B glycoprotein has 167 residues, is similar in sequence to K8.1A but it contains a 61 residue in frame deletion. In addition, K8.1B has only three N-glycosylation sites and lacks O-glycosylation sites.

### REFERENCES

- Chandran, B., et al. 1998. Human herpesvirus-8 ORF K8.1 gene encodes immunogenic glycoproteins generated by spliced transcripts. *Virology* 249: 140-149.
- Zhu, L., et al. 1999. Comparison of human sera reactivities in immunoblots with recombinant human herpesvirus (HHV)-8 proteins associated with the latent (ORF73) and lytic (ORFs 65, K8.1A and K8.1B) replicative cycles and in immunofluorescence assays with HHV-8-infected BCBL-1 cells. *Virology* 256: 381-392.
- Zhu, L., et al. 1999. Characterization of human herpesvirus-8 K8.1A/B glycoproteins by monoclonal antibodies. *Virology* 262: 237-249.
- Wu, L., et al. 2000. Human herpesvirus 8 glycoprotein K8.1: expression, post-translational modification and localization analyzed by monoclonal antibody. *J. Clin. Virol.* 17: 127-136.
- Tedeschi, R., et al. 2001. A prospective seroepidemiological study of human herpesvirus-8 infection and the risk of multiple myeloma. *Br. J. Cancer.* 84: 122-125.
- Wang, FZ., et al. 2001. Human herpesvirus 8 envelope glycoprotein K8.1A interaction with the target cells involves heparan sulfate. *J. Virol.* 75: 7517-7527.
- Luna, RE., et al. 2004. Kaposi's sarcoma-associated herpesvirus glycoprotein K8.1 is dispensable for virus entry. *J. Virol.* 78: 6389-6398.
- Jessop, S., et al. 2006. HIV-associated Kaposi's sarcoma. *Dermatol Clin.* 24: 509-520.
- He, F., et al. 2007. Human herpesvirus 8: seroprevalence and correlates in tumor patients from Xinjiang, China. *J. Med. Virol.* 79: 161-166.

### SOURCE

HHV-8 K8.1A (2A3) is a mouse monoclonal antibody raised against HHV-8 K8.1A .

### RESEARCH USE

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

### PRODUCT

Each vial contains 200 µg IgG<sub>2a</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

### APPLICATIONS

HHV-8 K8.1A (2A3) is recommended for detection of HHV-8 K8.1A of viral 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 HHV-8 K8.1A: 62 kDa.

### 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](http://www.scbt.com) for detailed protocols and support products.