

HHV-6 gp116/64/54 (6A5): sc-65449

BACKGROUND

The Herpesviridae family consists of DNA viruses that cause diseases in humans and other animals. This family is comprised of eight distinct viruses: HHV-1–HHV-8. Human herpes virus type 6 (HHV-6) and HHV-7 are associated with febrile illnesses and the childhood disease exanthem subitum, while HHV-8 resembles the Epstein-Barr virus in its possible transforming properties and may play a role in lymphomas and Kaposi's sarcoma. HHV-6, a newly described β -herpesvirus that shares homology with cytomegalovirus (CMV), consists of two closely related variants: HHV-6A and HHV-6B. HHV-6 infection is followed by persistence and latency in different tissues including monocytes/macrophages, salivary glands, brain and kidney. HHV-6 activation may play a role in the pathogenesis of certain demyelinating diseases such as progressive multifocal leukoencephalopathy (PML) and multiple sclerosis (MS). HHV-6 DNA is normally found as a marker of active viral infection in serum samples of MS patients.

REFERENCES

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4. Blumberg, B.M., et al. 2000. The HHV-6 paradox: ubiquitous commensal or insidious pathogen? A two-step *in situ* PCR approach. *J. Clin. Virol.* 16: 159-178.
5. Abdel-Haq, N.M. and Asmar, B.I. 2004. Human herpesvirus 6 (HHV-6) infection. *Indian J. Pediatr.* 71: 89-96.
6. Caserta, M.T., et al. 2004. Human herpesvirus 6 (HHV-6) DNA persistence and reactivation in healthy children. *J. Pediatr.* 145: 478-484.
7. Hernández-Losa, J., et al. 2005. Lack of association of polyomavirus and herpesvirus types 6 and 7 in human lymphomas. *Cancer* 103: 293-298.
8. Merk, J., et al. 2005. Fatal pulmonary failure attributable to viral pneumonia with human herpes virus 6 (HHV-6) in a young immunocompetent woman. *J. Intensive Care Med.* 20: 302-306.
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SOURCE

HHV-6 gp116/64/54 (6A5) is a mouse monoclonal antibody raised against protein gp116/64/54 of strains A and B of HHV-6 origin.

STORAGE

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

PRODUCT

Each vial contains 200 μ g IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

HHV-6 gp116/64/54 (6A5) is available conjugated to agarose (sc-65449 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-65449 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-65449 PE), fluorescein (sc-65449 FITC), Alexa Fluor[®] 488 (sc-65449 AF488), Alexa Fluor[®] 546 (sc-65449 AF546), Alexa Fluor[®] 594 (sc-65449 AF594) or Alexa Fluor[®] 647 (sc-65449 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-65449 AF680) or Alexa Fluor[®] 790 (sc-65449 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

HHV-6 gp116/64/54 (6A5) is recommended for detection of glycoprotein gB, gp116/64/54 of strains A and B of HHV-6 origin by immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of HHV-6 gp116/64/54: 116/64/54 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 2) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

SELECT PRODUCT CITATIONS

1. Prusty, B.K., et al. 2014. GP96 interacts with HHV-6 during viral entry and directs it for cellular degradation. *PLoS ONE* 9: e113962.
2. Bortolotti, D., et al. 2020. DNA sensors' signaling in NK cells during HHV-6A, HHV-6B and HHV-7 infection. *Front. Microbiol.* 11: 226.
3. Ogawa, H., et al. 2022. Nectin 2 acts as a viral entry mediated molecule that binds to human herpesvirus 6B glycoprotein B. *Viruses* 14: 160.

RESEARCH USE

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

PROTOCOLS

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