



HHV-8 (LN53): sc-73588

BACKGROUND

HHV-8, also designated Kaposi's sarcoma-associated herpesvirus, is associated with multicentric Castleman's disease and primary effusion lymphoma, a rare type of non-Hodgkin lymphoma affecting the body cavities. HHV-8 K14 is expressed at the surfaces of infected cells solely during the lytic cycle. It interacts with human CD200R, a receptor expressed on myeloid cells that is involved in locally restricting macrophage activation. The interaction of HHV-8 K14 with CD200R allows the protein to locally restrain macrophage activation by inhibiting TNF α production. HHV-8 encodes a viral-cyclin that is homologous to cellular D-type cyclins, a class of positive cell cycle mediators that are physiologically regulated by the p27 cell cycle inhibitor. HHV-8 cyclin is not sensitive to p27, however, which may explain the coexistence of p27 and high proliferative index of HHV-8 observed in individuals with primary effusion lymphoma (PEL).

REFERENCES

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2. Kirshner, J.R., et al. 1999. Expression of the open reading frame 74 (G protein-coupled receptor) gene of Kaposi's sarcoma (KS)-associated herpesvirus: implications for KS pathogenesis. *J. Virol.* 73: 6006-6014.
3. Ensoli, B., et al. 2001. Reactivation and role of HHV-8 in Kaposi's sarcoma initiation. *Adv. Cancer Res.* 81: 161-200.
4. Foreman, K.E. 2001. Kaposi's sarcoma: the role of HHV-8 and HIV-1 in pathogenesis. *Expert Rev. Mol. Med.* 3: 1-17.
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6. Hengge, U.R., et al. 2002. Update on Kaposi's sarcoma and other HHV-8 associated diseases. Part 2: pathogenesis, Castleman's disease, and pleural effusion lymphoma. *Lancet Infect. Dis.* 2: 344-352.
7. Liang, Y. and Ganem, D. 2004. RBP-J (CSL) is essential for activation of the K14/vGPCR promoter of Kaposi's sarcoma-associated herpesvirus by the lytic switch protein RTA. *J. Virol.* 78: 6818-6826.
8. Foster-Cuevas, M., et al. 2004. Human herpesvirus-8 K14 protein mimics CD200 in downregulating macrophage activation through CD200 receptor. *J. Virol.* 78: 7667-7676.
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SOURCE

HHV-8 (LN53) is a rat monoclonal antibody raised against recombinant HHV-8 corresponding to the latent nuclear antigen 1 molecule of HHV 8.

PRODUCT

Each vial contains 250 μ l culture supernatant containing IgG_{2c} with < 0.1% sodium azide.

APPLICATIONS

HHV-8 (LN53) is recommended for detection of HHV-8 by immunofluorescence (starting dilution to be determined by researcher, dilution range 1:10-1:200) and immunohistochemistry (including paraffin-embedded sections) (starting dilution to be determined by researcher, dilution range 1:10-1:200).

SELECT PRODUCT CITATIONS

1. Hussein, T.M., et al. 2012. Evaluation of c-kit expression in classic Kaposi's sarcoma in a cohort of Egyptian patients. *J. Egypt. Natl. Canc. Inst.* 24: 1-6.

STORAGE

Store at 4° C, ****DO 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.

PROTOCOLS

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