SANTA CRUZ BIOTECHNOLOGY, INC.

HHV-8 K14 (OX112): sc-53071

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

HHV-8, also designated Kaposi's sarcoma-associated herpesvirus, is also 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 and interacts with human CD200R, a receptor expressed on myeloid cells that is involved in locally restricting macrophage activation. HHV-8 K14 and CD200, which share 40% sequence identity, both interact with CD200R almost identically, indicating that HHV-8 mimics CD200 activity. The interaction of HHV-8 K14 with CD200R allows the protein to locally restrain macrophage activation by inhibiting TNF-α production.

REFERENCES

1. Talbot, S.J., Weiss, R.A., Kellam, P. and Boshoff, C. 1999. Transcriptional analysis of human herpesvirus-8 open reading frames 71, 72, 73, K14, and 74 in a primary effusion lymphoma cell line. Virology 257: 84-94.
2. Kirshner, J.R., Staskus, K., Haase, A., Lagunoff, M. and Ganem, D. 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., Stürzl, M. and Monini, P. 2001. Reactivation and role of HHV-8 in Kaposi's sarcoma initiation. Adv. Cancer Res. 81: 161-200.
4. Foreman, K.E. 2001. Kaposis sarcoma: the role of HHV-8 and HIV-1 in pathogenesis. Expert Rev. Mol. Med. 3: 1-17.
5. Corey, L., Brodie, S., Huang, M.L., Koelle, D.M. and Wald, A. 2002. HHV-8 infection: a model for reactivation and transmission. Rev. Med. Virol. 12: 47-63.
6. Hengge, U.R., Ruzicka, T., Tyring, S.K., Stuschke, M., Roggendorf, M., Schwartz, R.A. and Seeber, S. 2002. Update on Kaposi's sarcoma and other HHV8 associated diseases. Part 2: pathogenesis, Castleman's disease, and pleural effusion lymphoma. Lancet Infect. Dis. 2: 344-352.
7. Foster-Cuevas, M., Wright, G.J., Puklavec, M.J., Brown, M.H. and Barclay, A.N. 2004. Human herpesvirus 8 K14 protein mimics CD200 in down-regulating macrophage activation through CD200 receptor. J. Virol. 78: 7667-7676.
8. 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.
9. Zhang, J., Wang, J., Wood, C., Xu, D. and Zhang, L. 2005. Kaposi's sarcoma-associated herpesvirus/human herpesvirus 8 replication and transcription activator regulates viral and cellular genes via interferon-stimulated response elements. J. Virol. 79: 5640-5652.

SOURCE

HHV-8 K14 (OX112) is a mouse monoclonal antibody raised against purified K14 recombinant protein.

RESEARCH USE

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

PRODUCT

Each vial contains 200 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

HHV-8 K14 (OX112) is available conjugated to either phycoerythrin (sc-53071 PE) or fluorescein (sc-53071 FITC), 200 µg/ml, for IF, IHC(P) and FCM.

APPLICATIONS

HHV-8 K14 (OX112) is recommended for detection of HHV-8 K14 of viral origin by flow cytometry (1 µg per 1 x 10^6 cells).

Molecular Weight of HHV-8 K14: 55 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 for detailed protocols and support products.