SANTA CRUZ BIOTECHNOLOGY, INC.

KSHV ORF 57 (207.6): sc-135746

BACKGROUND

KSHV is associated with the endothelial tumor Kaposi's sarcoma (KS) and lymphoproliferative disorders in immunocompromised individuals. KSHV may stimulate and maintain abnormal plasma cell proliferation in myeloma and related disorders. KSHV ORF 57, also known as ORF57, is a 455 amino acid post-transcriptional regulator of Kaposi's sarcoma-associated herpesvirus. Localized in the host cytoplasm as well has the host nucleus, KSHV ORF 57 promotes the accumulation and nuclear export of viral intronless RNA transcripts by interacting with mRNAs and cellular export proteins. KSHV ORF 57 is suggested to act as a viral splicing factor that regulates viral RNA splicing and as a multifunctional regulator of the expression of viral lytic genes. Existing as a homodimer, KSHV ORF 57 is transactivated by ORF50. KSHV ORF 57 is highly expressed in lytically infected cells and is a member of the herpesviridae ICP27 protein family.

REFERENCES

1. Malik, P., et al. 2004. Functional co-operation between the Kaposi's sarcoma-associated herpesvirus ORF57 and ORF50 regulatory proteins. J. Gen. Virol. 85: 2155-2166.
2. Rezaee, S.A., et al. 2006. Kaposi's sarcoma-associated herpesvirus immune modulation: an overview. J. Gen. Virol. 87: 1781-1804.
3. Bilello, J.P., et al. 2008. Extreme dependence of gH and gL expression on ORF57 and association with highly unusual codon usage in rhesus monkey rhadinovirus. J. Virol. 82: 7231-7237.
4. Boyne, J.R. and Whitehouse, A. 2009. Nucleolar disruption impairs Kaposi's sarcoma-associated herpesvirus ORF57-mediated nuclear export of intronless viral mRNAs. FEBS Lett. 583: 3549-3556.
5. Colgan, K.J., et al. 2009. Identification of a response element in a herpesvirus saimiri mRNA recognized by the ORF57 protein. J. Gen. Virol. 90: 596-601.

SOURCE

KSHV ORF 57 (207.6) is a mouse monoclonal antibody raised against a synthetic peptide corresponding to ORF 57 of KSHV origin.

PRODUCT

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

KSHV ORF 57 (207.6) is available conjugated to agarose (sc-135746 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; and to HRP (sc-135746 HRP), 200 µg/ml, for WB, IHC(P) and ELISA.

APPLICATIONS

KSHV ORF 57 (207.6) is recommended for detection of Kaposi's sarcoma-associated herpes virus (KSHV) ORF 57 of KSHV by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of KSHV ORF 57: 50-52 kDa.

STORAGE

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

SELECT PRODUCT CITATIONS

1. Baquero-Pérez, B. and Whitehouse, A. 2015. Hsp70 isoforms are essential for the formation of Kaposi's sarcoma-associated herpesvirus replication and transcription compartments. PLoS Pathog. 11: e1005274.
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4. Pringle, E.S., et al. 2019. Kaposi's sarcoma-associated herpesvirus lytic replication interferes with mTORC1 regulation of autophagy and viral protein synthesis. J. Virol. 93: e00854-19.
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10. Gutierrez, I.V., et al. 2021. The expression and nuclear retention element of polyadenylated nuclear RNA is not required for productive lytic replication of Kaposi's sarcoma-associated herpesvirus. J. Virol. 95: e0009621.
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14. Najarro, G., et al. 2024. BiP/GRP78 is a pro-viral factor for diverse dsDNA viruses that promotes the survival and proliferation of cells upon KSHV infection. PLoS Pathog. 20: e1012660.

RESEARCH USE

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