SANTA CRUZ BIOTECHNOLOGY, INC.

KSHV ORF 57 (86.254): sc-135747



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

- Malik, P., Blackbourn, D.J., Cheng, M.F., Hayward, G.S. and Clements, J.B. 2004. Functional co-operation between the Kaposi's sarcoma-associated herpesvirus ORF57 and ORF50 regulatory proteins. J. Gen. Virol. 85: 2155-2166.
- Rezaee, S.A., Cunningham, C., Davison, A.J. and Blackbourn, D.J. 2006. Kaposi's sarcoma-associated herpesvirus immune modulation: an overview. J. Gen. Virol. 87: 1781-1804.
- 3. Bilello, J.P., Morgan, J.S. and Desrosiers, R.C. 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.
- 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.
- Majerciak, V. and Zheng, Z.M. 2009. Kaposi's sarcoma-associated herpesvirus ORF57 in viral RNA processing. Front. Biosci. 14: 1516-1528.
- Colgan, K.J., Boyne, J.R. and Whitehouse, A. 2009. Identification of a response element in a herpesvirus saimiri mRNA recognized by the ORF57 protein. J. Gen. Virol. 90: 596-601.
- Liu, X.H., Liu, Y.Q., Shi, X.Y., Wang, Y., Geng, Y.Q. and Wang, J.Z. 2010. Number of and distance between response elements in Kaposi's sarcomaassociated herpesvirus ORF57 promoter influence its activation by replication and transcription activator and its repression by interferon regulatory factor 7. Arch. Virol. 155: 361-366.
- Majerciak, V., Kruhlak, M., Dagur, P.K., McCoy, J.P. and Zheng, Z.M. 2010. Caspase-7 cleavage of Kaposi sarcoma-associated herpesvirus ORF57 confers a cellular function against viral lytic gene expression. J. Biol. Chem. 285: 11297-11307.
- Sahin, B.B., Patel, D. and Conrad, N.K. 2010. Kaposi's sarcoma-associated herpesvirus ORF57 protein binds and protects a nuclear noncoding RNA from cellular RNA decay pathways. PLoS Pathog. 6: e1000799.

RESEARCH USE

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

SOURCE

KSHV ORF 57 (86.254) 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.

APPLICATIONS

KSHV ORF 57 (86.254) is recommended for detection of Kaposi's sarcomaassociated herpes virus (KSHV) ORF 57 of KSHV origin 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.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

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.