

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 as 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

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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. Majerciak, V. and Zheng, Z.M. 2009. Kaposi's sarcoma-associated herpesvirus ORF57 in viral RNA processing. *Front. Biosci.* 14: 1516-1528.
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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 IgG₁ 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.

STORAGE

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

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.

RECOMMENDED SUPPORT REAGENTS

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

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.
2. Schumann, S., et al. 2016. Targeting the ATP-dependent formation of herpesvirus ribonucleoprotein particle assembly as an antiviral approach. *Nat. Microbiol.* 2: 16201.
3. Baquero-Perez, B., et al. 2019. The Tudor SND1 protein is an m⁶A RNA reader essential for replication of Kaposi's sarcoma-associated herpesvirus. *Elife* 8: e47261.
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.
5. Elbasani, E., et al. 2020. Kaposi sarcoma herpesvirus lytic replication is independent of the anaphase promoting complex activity. *J. Virol.* 94: e02079-19.
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7. Gabaev, I., et al. 2020. Quantitative proteomics analysis of lytic KSHV infection in human endothelial cells reveals targets of viral immune modulation. *Cell Rep.* 33: 108249.
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RESEARCH USE

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