SANTA CRUZ BIOTECHNOLOGY, INC.

CMV ICP8 (CH167): sc-69746



BACKGROUND

Cytomegalovirus (CMV) is a member of the herpes virus group which includes herpes simplex virus types 1 and 2; Varicella Zoster virus, which causes chicken pox; and Epstein Barr virus, which causes infectious mononucleosis. These viruses remain dormant within the body over a long period. In humans, CMV is known as HCMV or human herpesvirus 5 (HHV-5). HHV-5 causes only a brief mononeucleosis-like malaise in immunocompetent adults, but may cause severe illness or death in immunosuppressed individuals. CMV ICP8, also known as UL57, SSB or DB140, is an early, nonstructural gene product that localizes to the nucleus of infected cells. CMV ICP8 is the homolog of HSV ICP8 and is believed to function in a similar manner as a single-stranded DNA binding protein that is required for the replication of viral DNA.

REFERENCES

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- 3. Anders, D.G. 1990. Nucleotide sequence of a Cytomegalovirus singlestranded DNA-binding protein gene: comparison with α - and γ -herpesvirus counterparts reveals conserved segments. J. Gen. Virol. 71: 2451-2456.
- 4. Pari, G.S. and Anders, D.G. 1993. Eleven loci encoding *trans*-acting factors are required for transient complementation of human Cytomegalovirus oriLyt-dependent DNA replication. J. Virol. 67: 6979-6988.
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- Beqaj, S.H., Lerner, A.M. and Fitzgerald, J.T. 2007. Immunoassay with Cytomegalovirus early antigens from gene products p52 and CM₂ (UL44 and UL57) detect active infection in patients with chronic fatigue syndrome. J. Clin. Pathol. 61: 623-626.

SOURCE

CMV ICP8 (CH167) is a mouse monoclonal antibody raised against CMV.

PRODUCT

Each vial contains 100 $\mu g~lg G_{2a}$ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

CMV ICP8 (CH167) is recommended for detection of ICP8 of CMV origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of CMV ICP8: 140 kDa.

SELECT PRODUCT CITATIONS

- 1. Thoma, C. and Bogner, E. 2010. Short hairpin RNAs specific to human Cytomegalovirus terminase subunit pUL89 prevent viral maturation. Antivir. Ther. 15: 391-400.
- Isomura, H., Stinski, M.F., Murata, T., Yamashita, Y., Kanda, T., Toyokuni, S. and Tsurumi, T. 2011. The human Cytomegalovirus gene products essential for late viral gene expression assemble into prereplication complexes before viral DNA replication. J. Virol. 85: 6629-6644.
- Weisbach, H., Schablowsky, C., Vetter, B., Gruska, I., Hagemeier, C. and Wiebusch, L. 2017. Synthetic lethal mutations in the cyclin A interface of human Cytomegalovirus. PLoS Pathog. 13: e1006193.

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.