

CMV ICP22 (CH41): sc-69743

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 mononucleosis-like malaise in immunocompetent adults, but may cause severe illness or death in immunosuppressed individuals. CMV ICP22 (infected cell protein 22), also known as HWLF1, is a delayed early nuclear viral protein released from infected cells as a soluble protein. The gene encoding CMV ICP22 lies in the S component of the CMV genome. CMV ICP22 represses both viral and cellular promoters and enhancers.

REFERENCES

1. Mocarski, E.S., Pereira, L. and McCormick, A.L. 1988. Human Cytomegalovirus ICP22, the product of the HWLF1 reading frame, is an early nuclear protein that is released from cells. *J. Gen. Virol.* 69: 2613-2621.
2. Rubin, R.H. 1990. Impact of Cytomegalovirus infection on organ transplant recipients. *Rev. Infect. Dis.* 12: S754-S766.
3. Toome, B.K., Bowers, K.E. and Scott, G.A. 1991. Diagnosis of cutaneous Cytomegalovirus infection: a review and report of a case. *J. Am. Acad. Dermatol.* 24: 860-867.
4. Kanj, S.S., Sharara, A.I., Clavien, P.A. and Hamilton, J.D. 1996. Cytomegalovirus infection following liver transplantation: review of the literature. *Clin. Infect. Dis.* 22: 537-549.
5. Borchers, A.T., Perez, R., Kaysen, G., Ansari, A.A. and Gershwin, M.E. 1999. Role of Cytomegalovirus infection in mechanisms. *Transpl. Immunol.* 7: 75-82.
6. Drago, F., Aragone, M.G., Lugani, C. and Rebora, A. 2000. Cytomegalovirus infection in normal and immunocompromised humans. A review. *Dermatology* 200: 189-195.
7. Adair, R., Douglas, E.R., Maclean, J.B., Graham, S.Y., Aitken, J.D., Jamieson, F.E. and Dargan, D.J. 2002. The products of human Cytomegalovirus genes UL23, UL24, UL43 and US22 are tegument components. *J. Gen. Virol.* 83: 1315-1324.
8. Luo, J., Cun, W., Che, Y., Wang, L., Li, W., Liu, L. and Li, Q. 2007. Analysis of HSV-I ICP22 effects on HCMV major immediate-early promoter structure. *Sci. China C Life Sci.* 50: 292-297.
9. Maidji, E., Genbacev, O., Chang, H.T. and Pereira, L. 2007. Developmental regulation of human Cytomegalovirus receptors in cytotrophoblasts correlates with distinct replication sites in the placenta. *J. Virol.* 81: 4701-4712.

SOURCE

CMV ICP22 (CH41) is a mouse monoclonal antibody raised against CMV.

PRODUCT

Each vial contains 100 µg IgG_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

CMV ICP22 (CH41) is recommended for detection of ICP22 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 ICP22: 70 kDa.

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.