SANTA CRUZ BIOTECHNOLOGY, INC.

# CMV pp52 (10D8): sc-56971

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## 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 pp52 is a viral protein that acts as an accessory subunit of DNA polymerase and aids in DNA polymerization. CMV pp52 shares structural similarity with other DNA processivity factors, such as herpes simplex virus (HSV-1) UL42.

## REFERENCES


1. Alford, C.A., Stagno, S., Pass, R.F. and Britt, W.J. 1990. Congenital and perinatal cytomegalovirus infections. Rev. Infect. Dis. 12: S745-S753.
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.
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9. Appleton, B.A., Brooks, J., Loregian, A., Filman, D.J., Coen, D.M. and Hogle, J.M. 2006. Crystal structure of the cytomegalovirus DNA polymerase subunit UL44 in complex with the C terminus from the catalytic subunit. Differences in structure and function relative to unliganded UL44. J. Biol. Chem. 281: 5224-5232.


## SOURCE

CMV pp52 (10D8) is a mouse monoclonal antibody raised against CMV.

## PRODUCT

Each vial contains 100 µg $IgG_1$ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

CMV pp52 (10D8) is recommended for detection of pp52 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 pp52: 52 kDa.

## SELECT PRODUCT CITATIONS


1. Kapoor, A., Cai, H., Forman, M., He, R., Shamay, M. and Arav-Boger, R. 2012. Human cytomegalovirus inhibition by cardiac glycosides: evidence for involvement of the HERG gene. Antimicrob. Agents Chemother. 56: 4891-4899.
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3. Lu, Y., Orr, A. and Everett, R.D. 2016. Stimulation of the replication of ICP0-null mutant herpes simplex virus 1 and pp71-deficient human cytomegalovirus by Epstein-Barr virus tegument protein BNRF1. J. Virol. 90: 9664-9673.
4. McCormick, D., Lin, Y.T. and Grey, F. 2018. Identification of host factors involved in human cytomegalovirus replication, assembly, and egress using a two-step small interfering RNA screen. MBio 9: e00716-18.
5. Lee, C.H., Griffiths, S., Digard, P., Pham, N., Auer, M., Haas, J. and Grey, F. 2019. Asparagine deprivation causes a reversible inhibition of human cytomegalovirus acute virus replication. MBio 10: e01651-19.
6. Harrison, M.A.A., Hochreiner, E.M., Benjamin, B.P., Lawler, S.E. and Zwezdaryk, K.J. 2022. Metabolic reprogramming of glioblastoma cells during HCMV infection induces secretome-mediated paracrine effects in the microenvironment. Viruses 14: 103.


## 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.