

# Mengo 3DPol (8D10): sc-65632

## BACKGROUND

The Mengovirus belongs to the genus *Cardiovirus* which is a member of the Picornaviridae. Mengovirus is a non-enveloped icosohedral virus that has a positive sense, single stranded RNA genome. The genome is divided into three parts: P1 (which encodes the virus capsid proteins), P2 and P3 (which both encode genes required for genome replication). Vertebrates are susceptible to infection by Mengovirus, though the illness caused by it is not severe enough to require vaccination. The Mengovirus suppresses the host's immune response by reducing the expression of NFκB. The amount of RNA polymerase (3DPol) of Mengovirus is commonly used to determine the extent of viral replication in mammals.

## REFERENCES

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2. Hall, D.J. and Palmenberg, A.C. 1997. Mengovirus 3C proteinase: recombinant expression, intergenus substrate cleavage and localization *in vivo*. *Virus Genes* 13: 99-110.
3. Duque, H. and Palmenberg, A.C. 1997. Epitope mapping of monoclonal antibodies raised to recombinant Mengo 3D polymerase. *Virus Genes* 13: 159-168.
4. Lund, G.A. and Scraba, D.G. 1980. The isolation of Mengovirus stable non-capsid polypeptides from infected L cells and preliminary characterization of an RNA polymerase activity associated with polypeptide E. *J. Gen. Virol.* 44: 391-403.
5. Frolov, V.G., Duque, H. and Palmenberg, A.C. 1999. Quantification of endogenous viral polymerase, 3D(Pol), in preparations of Mengo and encephalomyocarditis viruses. *Virology* 260: 148-155.
6. Martin, L.R., Neal, Z.C., McBride, M.S. and Palmenberg, A.C. 2000. Mengovirus and encephalomyocarditis virus poly(C) tract lengths can affect virus growth in murine cell culture. *J. Virol.* 74: 3074-3081.
7. Neal, Z.C., Harms, J.S., Hill, M.R. and Splitter, G.A. 2002. Encephalomyocarditis and Mengoviruses productively infect murine T-lymphocyte cell lines but not fresh *ex vivo* derived T lymphocytes. *Viral Immunol.* 15: 155-163.

## SOURCE

Mengo 3DPol (8D10) is a mouse monoclonal antibody raised against recombinant Mengo 3DPol.

## PRODUCT

Each vial contains 200 µg IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Mengo 3DPol (8D10) is recommended for detection of Mengo 3D Polymerase of viral origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

## 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.

## 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](http://www.scbt.com) for detailed protocols and support products.