



Rotavirus (0521): sc-58188

BACKGROUND

Rotaviruses belong to the *Reoviridae* family and have a genome of 11 double-stranded RNA segments surrounded by a distinctive three-layered icosahedral protein capsid. Rotaviruses generally infect gastrointestinal epithelial cells at the tip of the villus where they are ingested by the cell in endocytosis via the endosome. Proteins on the surface of the virus disrupt the membrane of the endosome and produce a difference in the Ca^{2+} concentration which leads to structural changes of the epithelial cell and diarrhea. Rotavirus infection leads to gastroenteritis, a self-limiting, mild to severe disease characterized by vomiting, watery diarrhea, low-grade fever and a possible temporary lactose intolerance.

REFERENCES

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4. Clark, B. and Desselberger, U. 1988. Myristylation of Rotavirus proteins. *J. Gen. Virol.* 69: 2681-2686.
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9. Pesavento, J.B., Crawford, S.E., Estes, M.K. and Prasad, B.V. 2006. Rotavirus proteins: structure and assembly. *Curr. Top. Microbiol. Immunol.* 309: 189-219.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

SOURCE

Rotavirus (0521) is a mouse monoclonal antibody raised against Rotavirus.

PRODUCT

Each vial contains 100 µg IgG₂ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Rotavirus (0521) is recommended for detection of Rotavirus by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Molecular Weight of Rotavirus: 42 kDa.

SELECT PRODUCT CITATIONS

1. Espinosa, A.C., et al. 2012. Quantifying the reduction in potential health risks by determining the sensitivity of poliovirus type 1 chat strain and rotavirus SA-11 to electron beam irradiation of iceberg lettuce and spinach. *Appl. Environ. Microbiol.* 78: 988-993.
2. Espinosa-García, A.C., et al. 2014. Removal of bacteria, protozoa and viruses through a multiple-barrier household water disinfection system. *J. Water Health* 12: 94-104.

RESEARCH USE

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