

Rotavirus (3F7): sc-53560

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 Ca²⁺ 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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3. Sergeev, V.A., Bukrinskaia, A.G., Rukhadze, G.G. and Kras'ko, A.G. 1987. Molecular drift of Rotavirus during attenuation. *Vopr. Virusol.* 32: 347-352.
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SOURCE

Rotavirus (3F7) is a mouse monoclonal antibody raised against purified Rotavirus.

STORAGE

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

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Rotavirus (3F7) is available conjugated to agarose (sc-53560 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53560 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53560 PE), fluorescein (sc-53560 FITC), Alexa Fluor® 488 (sc-53560 AF488), Alexa Fluor® 546 (sc-53560 AF546), Alexa Fluor® 594 (sc-53560 AF594) or Alexa Fluor® 647 (sc-53560 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-53560 AF680) or Alexa Fluor® 790 (sc-53560 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Rotavirus (3F7) is recommended for detection of Rotavirus by immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Molecular Weight of Rotavirus: 42 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

SELECT PRODUCT CITATIONS

1. Kinose, Y., Sawada, K., Nakamura, K., Sawada, I., Toda, A., Nakatsuka, E., Hashimoto, K., Mabuchi, S., Takahashi, K., Kurachi, H., Lengyel, E. and Kimura, T. 2015. The hypoxia-related microRNA miR-199a-3p displays tumor suppressor functions in ovarian carcinoma. *Oncotarget* 6: 11342-11356.

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.