

Rotavirus virus p42 (1-O-15): sc-52435

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. The p42 group-specific antigen of rotaviruses is located in the internal capsid on lamellar crystalline structures in the nucleus and cytoplasm.

REFERENCES

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SOURCE

Rotavirus virus p42 (1-O-15) is a mouse monoclonal antibody raised against bovine rotavirus virus.

PRODUCT

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

APPLICATIONS

Rotavirus virus p42 (1-O-15) is recommended for detection of Rotavirus virus p42 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 Rotavirus virus p42: 42 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.