Recombinant Rotavirus A Outer capsid protein VP4

Catalog No: #AP72893

Package Size: #AP72893-1 20ug #AP72893-2 100ug #AP72893-3 1mg

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Description

Product Name	Recombinant Rotavirus A Outer capsid protein VP4
Brief Description	Recombinant Protein
Host Species	Yeast
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:247-479aaSequence Info:Partial
Accession No.	P11200
Uniprot	P11200
Calculated MW	28.3 kDa
Tag Info	N-terminal 6xHis-tagged
Target Sequence	AQVSEDIIISKTSLWKEMQYNRDIIIRFKFNNSIIKLGGLGYKWSEISFKAANYQYNYLRDGEQVTAHTTCSVNGV NNFSYNGGLLPTHFSISRYEVIKENSYVYVDYWDDSQAFRNMVYVRSLAANLNSVKCSGGNYNFQMPVGAW PVMSGGAVSLHFAGVTLSTQFTDFVSLNSLRFRFSLTVEEPPFSILRTRVSGLYGLPASNPNSGHEYYEIAGRF SLISLVPSNDDY
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

Spike-forming protein that mediates virion attachment to the host epithelial cell receptors and plays a major role in cell penetration, determination of host range restriction and virulence. Rotavirus entry into the host cell probably involves multiple sequential contacts between the outer capsid proteins VP4 and VP7, and the cell receptors. According to the considered strain, VP4 ses to essentially target sialic acid and,or the integrin heterodimer ITGA2,ITGB1 .Outer capsid protein VP5*: forms the spike "foot" and "body". Acts as a mbrane permeabilization protein that mediates release of viral particles from endosomal compartments into the cytoplasm. In integrin-dependent strains, VP5* targets the integrin heterodimer ITGA2,ITGB1 for cell attachment .VP8* forms the head of the spikes. It is the viral hagglutinin and an important target of neutralizing antibodies. In sialic acid-dependent strains, VP8* binds to host cell sialic acid, most probably a ganglioside, providing the initial contact .

References

Sequence of the fourth gene of human rotaviruses recovered from asymptomatic or symptomatic infections.Gorziglia M., Green K.Y., Nishikawa K., Taniguchi K., Jones R.W., Kapikian A.Z., Chanock R.M.J. Virol. 62:2978-2984(1988)Research Topic:Others