

Recombinant RSV (A, rsb1734) glycoprotein G / RSV-G Protein (95% Homology) (His Tag)

Catalog No. PKSV030230

Note: Centrifuge before opening to ensure complete recovery of vial contents.

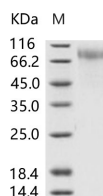
Description

Synonyms	G Protein;RSV;Human respiratory syncytial virus
Species	RSV
Expression Host	HEK293 Cells
Sequence	Asn 66-Arg 297
Accession	P27022-1
Calculated Molecular Weight	26.7 kDa
Observed molecular weight	80-90 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 90 % as determined by reducing SDS-PAGE.

Background

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Human respiratory syncytial virus (HRSV) is the most common etiological agent of acute lower respiratory tract disease in infants and can cause repeated infections throughout life. It is classified within the genus pneumovirus of the family paramyxoviridae. Like other members of the family, HRSV has two major surface glycoproteins (G and F) that play important roles in the initial stages of the infectious cycle. HRSV G protein is a type II glycoprotein of 289-299 amino acids (depending on the virus strain) with a signal/anchor hydrophobic domain and is extensively modified by the addition of both N- and O-linked oligosaccharides to achieve the mature form of 8-9 kDa. The C-terminal ectodomain of the G protein has a central region and four cysteines which are conserved in all HRSV isolates and have been proposed as the putative receptor binding site. The G protein mediates attachment of the virus to the host cell membrane by interacting with heparan sulfate, initiating the infection. As similar to mucins in amino acid compositions, the RSV G protein can interact with host CX3CR1, the receptor for the CX3C chemokine fractalkine, and thus modulates the immune response and facilitate infection. Secreted glycoprotein G helps RSV escape antibody-dependent restriction of replication by acting as an antigen decoy and by modulating the activity of leukocytes bearing Fcγ receptors. Unlike the other paramyxovirus attachment proteins, HRSV-G lacks both neuraminidase and hemagglutinating activities.

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