

Synonym

Prefusion glycoprotein F0/pre-F protein (RSV)

Source

FITC-Labeled Human respiratory syncytial virus A (strain A2) Pre-F0, His Tag (RSF-V52H3) is expressed from human 293 cells (HEK293).

Molecular Characterization

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 56.1 kDa. The protein migrates as 60-65 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Conjugate

FITC

Excitation source: 488 nm spectral line, argon-ion laser

Excitation Wavelength: 488 nm

Emission Wavelength: 535 nm

Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with FITC using standard chemical labeling method. The residual FITC is removed by molecular sieve treatment during purification process.

Protein Ratio

The FITC to protein molar ratio is 1.0-2.0.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

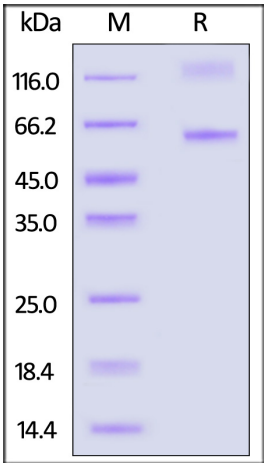
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please protect from light and avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



FITC-Labeled Human respiratory syncytial virus A (strain A2) Pre-F0, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA

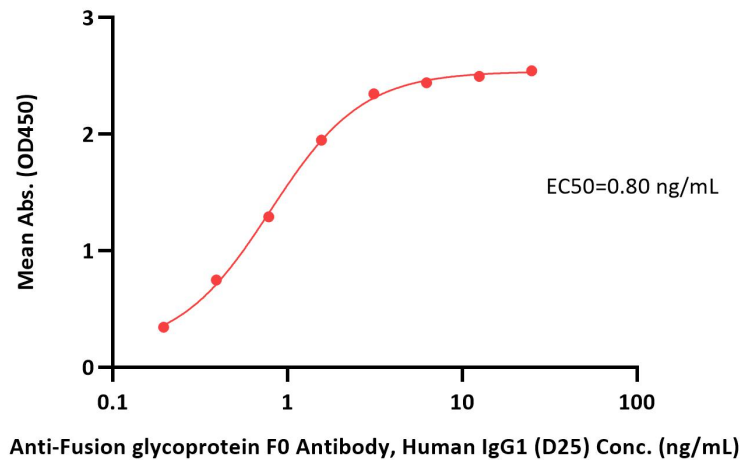


FITC-Labeled Human respiratory syncytial virus A (strain A2) Pre-F0 Protein, His Tag

Catalog # RSF-V52H3



FITC-Labeled Human respiratory syncytial virus A (strain A2) Pre-F0, His Tag ELISA
0.2 µg of FITC-Labeled Human respiratory syncytial virus A (strain A2) Pre-F0, His Tag per well



Immobilized Anti-Fusion glycoprotein F0 Antibody, Human IgG1 (D25) at 2 µg/mL (100 µL/well) can bind FITC-Labeled Human respiratory syncytial virus A (strain A2) Pre-F0, His Tag (Cat. No. RSF-V52H3) with a linear range of 0.02-0.625 µg/mL (QC tested).

Background

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. The RSV fusion glycoprotein (RSV F) is the principal target of RSV neutralizing antibodies in human sera. The RSV F is a type I viral fusion protein synthesized as inactive, single-chain polypeptides that assemble into trimers. RSV F fuses the viral and host cell membranes by irreversible protein refolding from the labile prefusion conformation to the stable post-fusion conformation. Both states exhibit epitopes targeted by neutralizing antibodies, and post-fusion RSV F is being developed as a vaccine candidate.

