Hendra virus Pre-Fusion glycoprotein (A263T), His Tag

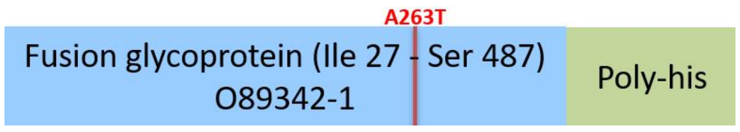
Catalog # FUN-H52H4

Source

Hendra virus Pre-Fusion glycoprotein (A263T), His Tag(FUN-H52H4) is expressed from human 293 cells (HEK293). It contains AA Ile 27 - Ser 487 (Accession # O89342-1 (A263T)).

Predicted N-terminus: Ile 27

Molecular Characterization



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

The protein has a calculated MW of 55.7 kDa. The protein migrates as 60-70 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS 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

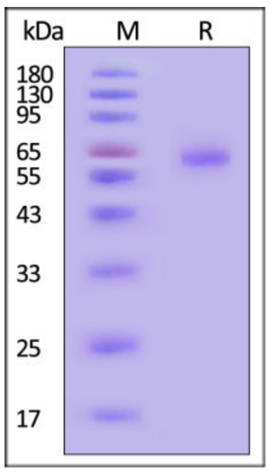
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

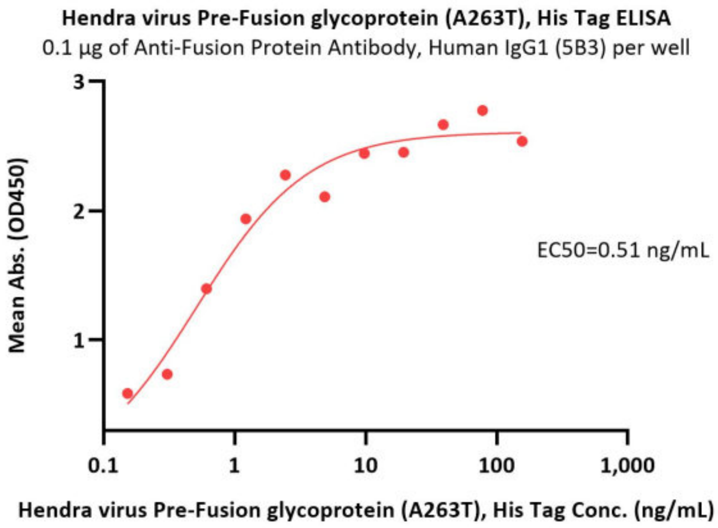
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



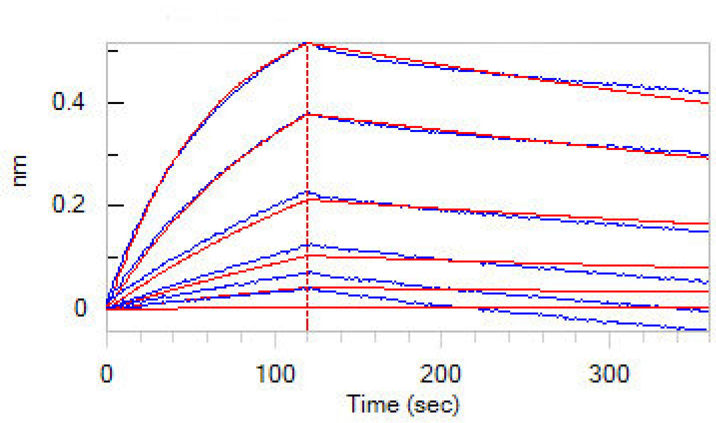
Hendra virus Pre-Fusion glycoprotein (A263T), His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

Bioactivity-ELISA



Immobilized Anti-Fusion Protein Antibody, Human IgG1 (5B3) at 1 μg/mL (100 μL/well) can bind Hendra virus Pre-Fusion glycoprotein (A263T), His Tag (Cat. No. FUN-H52H4) with a linear range of 1-2 ng/mL (QC tested).

Bioactivity-BLI



Loaded Anti-Fusion Protein Antibody, Human IgG1 (5B3) on AHC Biosensor, can bind Hendra virus Pre-Fusion glycoprotein (A263T), His Tag (Cat. No. FUN-H52H4) with an affinity constant of 10.3 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Hendra virus (HeV) and Nipah virus (NiV) are henipaviruses discovered in the mid-to late 1990s that possess a broad host tropism and are known to cause severe and often fatal disease in both humans and animals. HeV and NiV infect host cells through the coordinated efforts of two envelope glycoproteins. The G glycoprotein attaches to cell receptors, triggering the fusion (F) glycoprotein to execute membrane fusion. G is a type II homotetrameric transmembrane protein responsible for binding to ephrinB2 or ephrinB3 (ephrinB2/B3) receptors. F is a homotrimeric type I transmembrane protein that is synthesized as a premature F0 precursor and cleaved by cathepsin L during endocytic recycling to yield the mature, disulfide-linked, F1 and F2 subunits. Upon binding to ephrinB2/B3, NiV G undergoes conformational changes leading to F triggering and insertion of the F hydrophobic fusion peptide into the target membrane. Subsequent refolding into the more stable post-fusion F conformation drives merger of the viral and host membranes to form a pore for genome delivery to the cell cytoplasm.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.