Monoclonal Anti-Hendra virus F glycoprotein Antibody, Human IgG1 (1A7) (MALS verified)

Catalog # FUN-MY2097

Source

Monoclonal Anti-Hendra virus F glycoprotein Antibody, Human IgG1 (1A7) is a chimeric monoclonal antibody recombinantly expressed from HEK293, which combines the variable region of a mouse monoclonal antibody with Human constant domain.

Clone

1A7

Species

Mouse

Isotype

Human IgG1 | Human Kappa

Conjugate

Unconjugated

Antibody Type

Recombinant Monoclonal

Reactivity

Virus

Immunogen

Recombinant Hendra virus Pre-Fusion glycoprotein (A263T) is expressed from human 293 cells.

Specificity

Specifically recognizes Hendra virus Pre-Fusion glycoprotein(A263T).

Application

Application	Recommended Usage
Western Blot	10-5 ug/mL
ELISA	0.6-78 ng/mL

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Purification

Protein A purified/ Protein G purified

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.

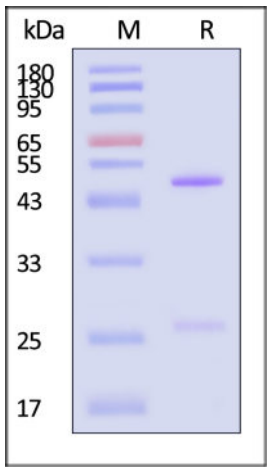
Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

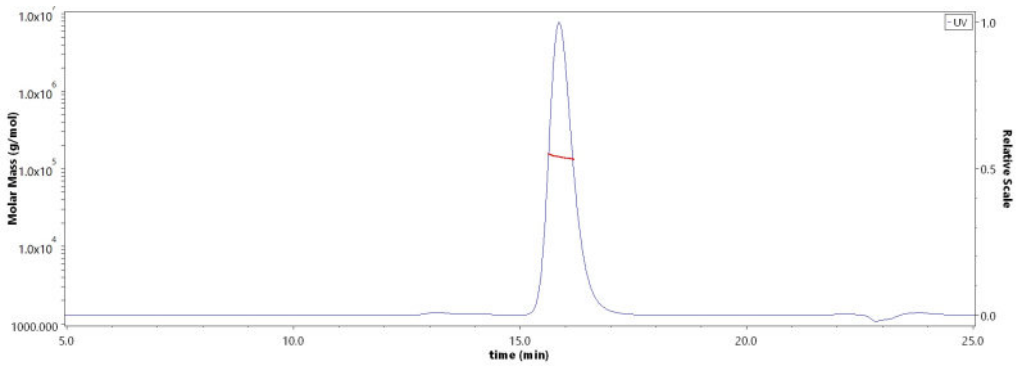
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

SEC-MALS

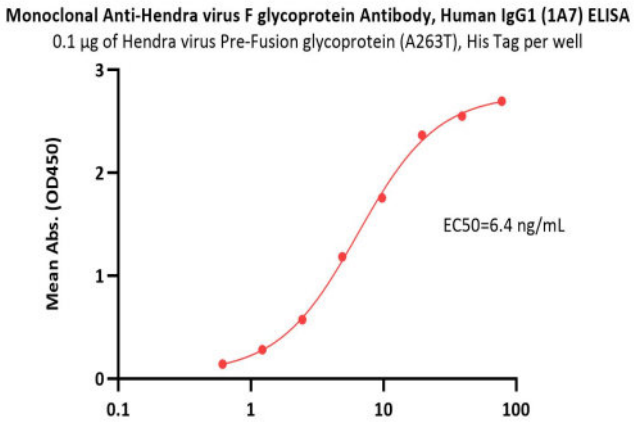


Monoclonal Anti-Hendra virus F glycoprotein Antibody, Human IgG1 (1A7) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).



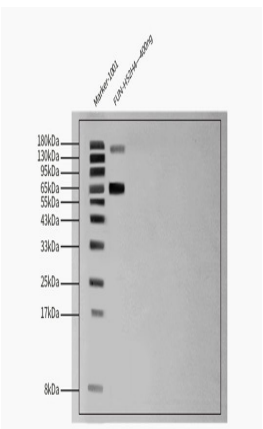
The purity of Monoclonal Anti-Hendra virus F glycoprotein Antibody, Human IgG1 (1A7) (Cat. No. FUN-MY2097) is more than 90% and the molecular weight of this protein is around 135-160 kDa verified by SEC-MALS. Report

Bioactivity-ELISA



Immobilized Hendra virus Pre-Fusion glycoprotein (A263T), His Tag (Cat. No. FUN-H52H4) at 1 μg/mL (100 μL/well) can bind Monoclonal Anti-Hendra virus F glycoprotein Antibody, Human IgG1 (1A7) (Cat. No. FUN-MY2097) with a linear range of 0.6-9.8 ng/mL (QC tested).

Western Blot



Detection of Monoclonal Anti-Hendra virus F glycoprotein Antibody, Human IgG1 (1A7), Human IgG1 | Human Kappa, HEK by Western Blot. Monoclonal Anti-Hendra virus F glycoprotein Antibody, Human IgG1 (1A7), Human IgG1 | Human Kappa, HEK at 5ug/ml dilution + Hendra virus Pre-Fusion glycoprotein (A263T), His Tag at 400ng.

Secondary Antibody: (HFC)-HRP Goat Anti-Human IgG,Fcγ fragment specific (min X Bov,Hrs,Ms Sr Prot) at 1/2000 dilution.

Predicted band size: 65 kDa 12% Bis-Tris Protein Gel.

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