

Monoclonal Anti-Nipah virus (NiV) Glycoprotein G Antibody, Human IgG1 (5G9)

Catalog # GLN-MY2257



Source

Monoclonal Anti-Nipah virus (NiV) Glycoprotein G Antibody, Human IgG1 (5G9) is a recombinant chimeric monoclonal antibody expressed in HEK293, which combines the variable region of a mouse monoclonal antibody with human constant domain.

Antibody Type

Recombinant Monoclonal

Clone

5G9

Isotype

Human IgG1, Kappa

Host Species

Mouse

Reactivity

Virus

Immunogen

Recombinant Nipah virus Glycoprotein G is expressed from human 293 cells

Specificity

Specifically recognizes Nipah virus Glycoprotein G.

Application

Application	Recommended Usage
Western Blot	10-2 µg/mL

Purification

Protein A purified / Protein G purified.

Aggregation

Less than 10%, as determined by SEC-MALS.

Concentration

Please refer to the Certificate of Analysis (CoA).

Form

Lyophilized

Formulation

Lyophilized from a 0.22 µm-filtered solution in PBS (pH 7.4), with trehalose as protectant.

Please contact us for customized product forms or formulations.

Reconstitution

Please refer to the Certificate of Analysis (CoA) for specific instructions.

Shipping

Lyophilized product is shipped at ambient temperature.

Storage

For long term storage, the product should be stored in a 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.

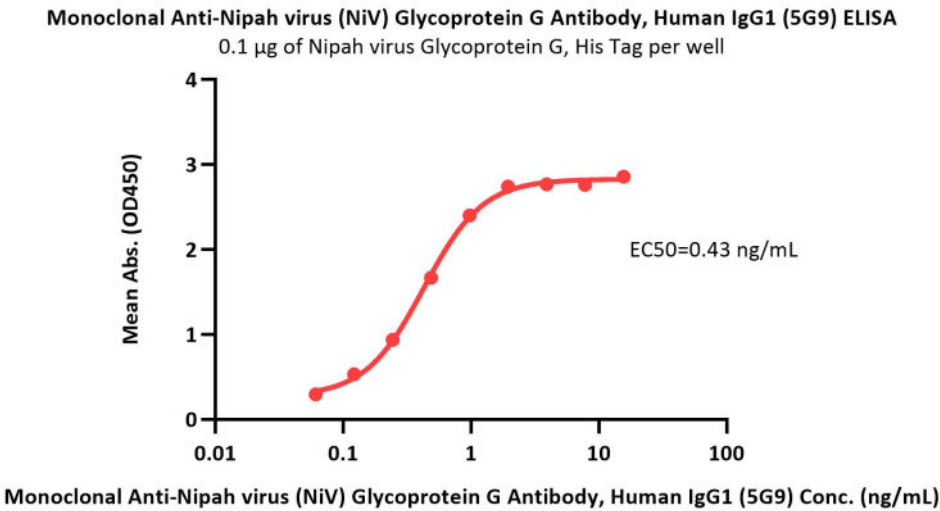
Notices

Product Specific Notices: For research use only.

ACRO Quality Management System

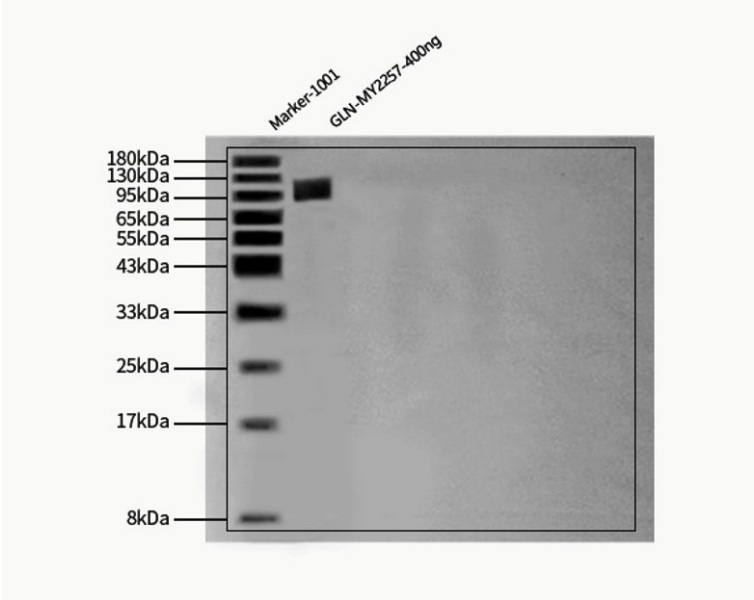
- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

Bioactivity-ELISA



Immobilized Nipah virus Glycoprotein G, His Tag (Cat. No. GLN-N52H3) at 1 µg/mL (100 µL/well) can bind Monoclonal Anti-Nipah virus (NiV) Glycoprotein G Antibody, Human IgG1 (5G9) (Cat. No. GLN-MY2257) with a linear range of 0.06-1 ng/mL (QC tested).

Western Blot



Detection of Monoclonal Anti-Nipah virus (NiV) Glycoprotein G Antibody, Human IgG1 (5G9) by Western Blot. Monoclonal Anti-Nipah virus (NiV) Glycoprotein G Antibody, Human IgG1 (5G9) at 2 µg/mL dilution + Nipah virus Glycoprotein G, His Tag (MALS verified) at 400 ng. Secondary: (HFC)-HRP Goat Anti-Human IgG,Fcγ fragment specific (min X Bov,Hrs,Ms Sr Prot) at 1/2000 dilution
Predicted band size: 80-100 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.



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