Monoclonal Anti-SFTS-Gn Antibody, Human IgG1 (1G12)

Catalog # SFN-M763

Source

Monoclonal Anti-SFTS-Gn Antibody, Human IgG1 (1G12) is a chimeric monoclonal antibody recombinantly expressed from HEK293, which combines the variable region of a mouse monoclonal antibody with Human constant domain.

Clone

1G12

Isotype

Human IgG1 | Human Kappa

Conjugate

Unconjugated

Antibody Type

Recombinant Monoclonal

Reactivity

Virus

Immunogen

Recombinant SFTS virus Gn Protein (Human/China/HB29/2010) is expressed from human 293 cells.

Specificity

Specifically recognizes SFTS virus Gn Protein (Human/China/HB29/2010).

Application

Application	Recommended Usage
ELISA	0.2-63 ng/mL

Purity

>95% as determined by SDS-PAGE.

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

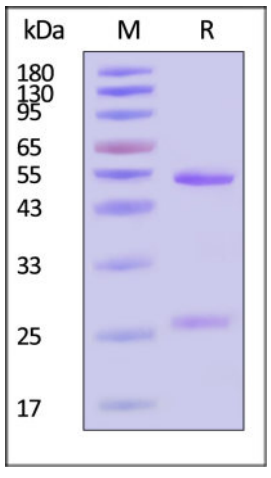
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

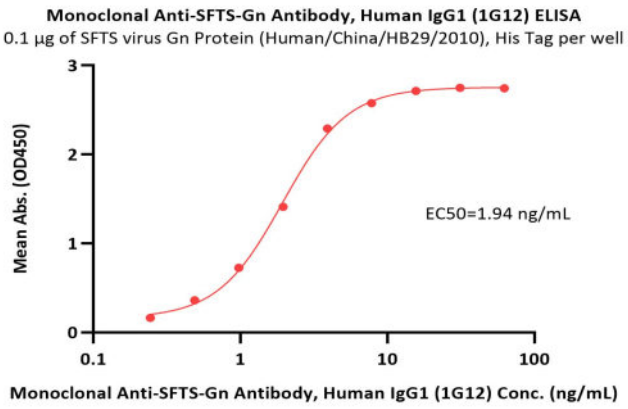
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



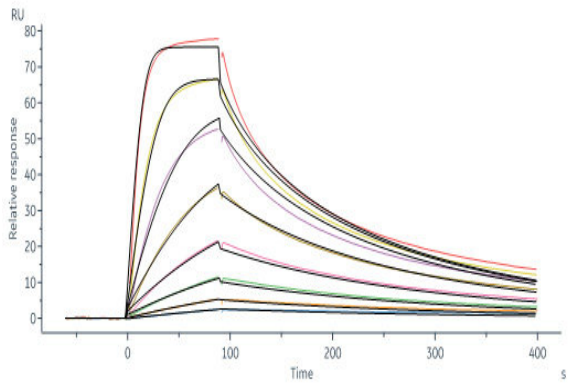
Monoclonal Anti-SFTS-Gn Antibody, Human IgG1 (1G12) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

Bioactivity-ELISA



Immobilized SFTS virus Gn Protein (Human/China/HB29/2010), His Tag (Cat. No. GNN-S52H3) at 1 μg/mL (100 μL/well) can bind Monoclonal Anti-SFTS-Gn Antibody, Human IgG1 (1G12) (Cat. No. SFN-M763) with a linear range of 0.2-4 ng/mL (QC tested).

Bioactivity-SPR



Monoclonal Anti-SFTS-Gn Antibody, Human IgG1 (1G12) (Cat. No. SFN-M763) captured on Protein A Chip can bind SFTS virus Gn Protein (Human/China/HB29/2010), His Tag (Cat. No. GNN-S52H3) with an affinity constant of 3.24 nM as determined in a SPR assay (Biacore 8K) (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