

Glycoprotein Gn from Rift Valley Fever Virus with C-Terminal Histidine Tag, Recombinant from Baculovirus

Catalog No. NR-52147

This reagent is the tangible property of the U.S. Government.

Product Description:

A recombinant form of the aminoterminal glycoprotein (Gn) from Rift Valley fever (RVF) virus, ZH-501 (GenPept: [ABD38813](#)) was produced in SF9 insect cells using a baculovirus expression system, purified by nickel affinity (HisTrap™ Fast Flow) chromatography and vialled in 10 mM Tris (pH 8.0), 250 mM NaCl and 50% glycerol. NR-52147 contains 407 residues (ectodomain) of the RVF virus Gn and includes a thrombin cleavage site and C-terminal octa-histidine tag; the N-terminal gp67 secretion signal sequence is presumably cleaved and the T4 foldon trimerization domain is excluded.

Lot: 70032592

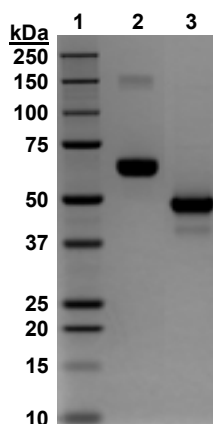
Manufacturing Date: 31JUL2020

TEST	SPECIFICATIONS	RESULTS
Appearance	Clear and colorless	Clear and colorless
SDS-PAGE Analysis (Coomassie Blue)	Protein band of interest represents > 90% of total staining intensity	Protein band of ~ 50 kDa represents > 90% of total staining intensity (Figure 1) ¹
Concentration by Bradford Assay Bovine Serum Albumin (standard)	Report results	0.45 mg per mL
Final Product Amount per vial Volume per vial	Report results Report results	89 µg 200 µL
Functional Activity by Western Blot Analysis Monoclonal anti-histidine tag	Reactive	Reactive (Figure 2) ²
Endotoxin Content (Limulus Amebocyte Lysate Assay)	< 1000 EU per mg	< 100 EU per mg
Filtration	0.2 µm sterile-filtered	0.2 µm sterile-filtered

¹The recombinant protein migrated to a slightly larger size than was expected, likely caused by glycosylation common in recombinant glycoproteins derived from RVFV. For more information, please see Faburay, B., et al. "Rift Valley Fever Virus Structural and Nonstructural Proteins: Recombinant Protein Expression and Immunoreactivity against Antisera from Sheep." *Vector Borne Zoonotic Dis.* 13 (2013): 619-629. PubMed: 23962238.

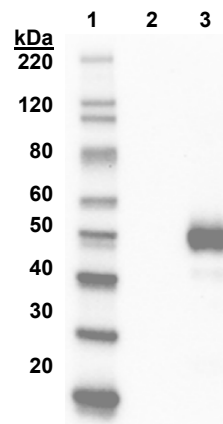
²Using a 1:1000 dilution of mouse monoclonal anti-histidine tag (R&D Systems MAB050) as primary antibody and a 1:1000 dilution of HRP-conjugated goat anti-mouse IgG (R&D Systems HAF007) as secondary antibody.

Figure 1: SDS-PAGE Analysis



Lane 1: Precision Plus Protein™ Standard (5 µL)
Lane 2: Bovine serum albumin (2 µg)
Lane 3: NR-52147 (2 µg)

Figure 2: Anti-Histidine Western Blot Analysis



Lane 1: MagicMark™ XP Protein Standard (5 µL)
Lane 2: Bovine serum albumin (0.5 µg)
Lane 3: NR-52147 (0.5 µg)

/Heather Couch/
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09 DEC 2020

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