

Spike Glycoprotein ΔTM from SARS Coronavirus with C-Terminal Histidine Tag, Recombinant from Baculovirus

Catalog No. NR-59227

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

Product Description:

NR-59227 is a truncated glycosylated recombinant form of the SARS-CoV spike (S) protein (GenPept: [ABD72988](#)) with a 60-amino acid deletion of the transmembrane domain (ΔTM) at the C-terminal end. It was produced in Sf9 insect cells using a baculovirus expression vector system and purified by immobilized metal affinity chromatography. NR-59227 has a theoretical molecular weight of approximately 135.8 kDa and includes a T4 foldon trimerization domain, thrombin cleavage site and C-terminal octa-histidine tag.

Lot: 70059108

Manufacturing Date: 22SEP2023

TEST	SPECIFICATIONS	RESULTS
Appearance	Clear and colorless	Clear and colorless
SDS-PAGE Analysis	Protein band of interest represents > 90% of total staining intensity	Dominant band of ~ 150 kDa represents > 93% of total staining intensity (Figure 1) ¹
Concentration by Bicinchoninic Acid Assay Bovine Serum Albumin (standard)	Report results	0.581 mg/mL
Vial Content Amount per vial Volume per vial	Report results Report results	116 µg 200 µL
Identification by Western Blot Analysis Monoclonal anti-SARS-CoV S ² Monoclonal anti-histidine tag ³	Reactive Reactive	Reactive (Figure 2) Reactive (Figure 3)
Endotoxin Content (Limulus Amebocyte Lysate Assay)	Report results	< 45.61 EU/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 spike proteins derived from coronaviruses. For more information, please see Chakraborti, S., et al. "The SARS Coronavirus S Glycoprotein Receptor Binding Domain: Fine Mapping and Functional Characterization." *Virology* 2 (2005): 73. PubMed: 16122388.

²Using a 1:2500 dilution of monoclonal anti-SARS-CoV S protein (BEI Resources NR-618) as primary antibody and a 1:4000 dilution of HRP-conjugated goat anti-mouse IgG (Jackson ImmunoResearch 115-035-003) as secondary antibody

³Using a 1:4000 dilution of mouse monoclonal anti-histidine tag (R&D Systems MAB050-100) as primary antibody and a 1:4000 dilution of HRP-conjugated goat anti-mouse IgG (Jackson ImmunoResearch 115-035-003) as secondary antibody

Figure 1: SDS-PAGE Analysis

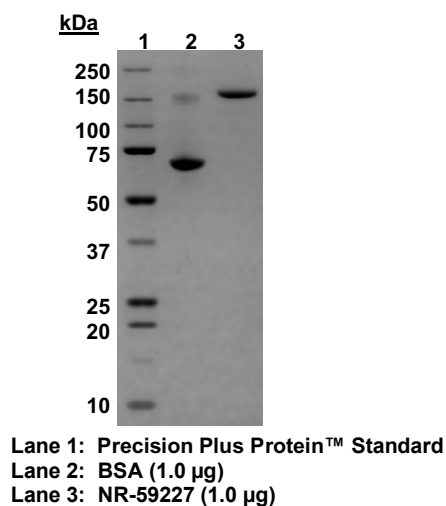


Figure 2: Anti-S Western Blot

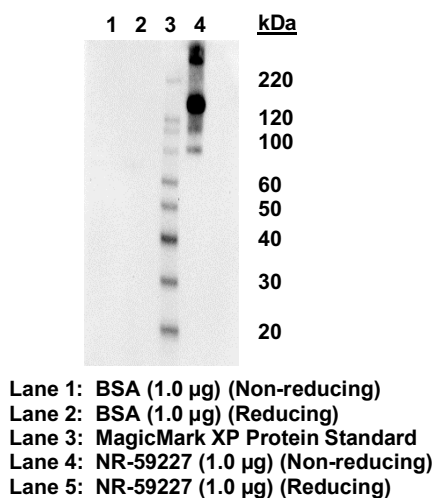
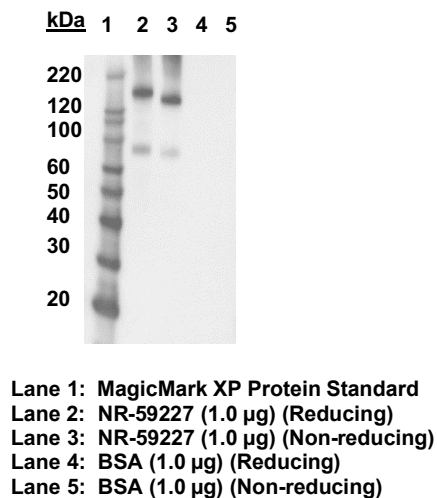


Figure 3: Anti-Histidine Tag Western Blot



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23 MAY 2024

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