Certificate of Analysis for NR-51404

Streptococcus pneumoniae Family 2, Clade 3 Pneumococcal Surface Protein A (PspA UAB099) with C-Terminal Histidine Tag, Recombinant from Escherichia coli

Catalog No. NR-51404

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

Product Description:

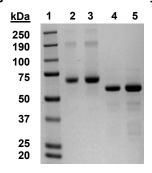
NR-51404 is a recombinant pneumococcal surface protein A (PspA UAB099) from Streptococcus pneumoniae (S. pneumoniae) Family 2, Clade 3. NR-51404 lot 70050710 containing a C-terminal hexa-histidine tag was expressed in Escherichia coli BL21(DE3) pLysS and purified by nickel affinity chromatography.

Manufacturing Date: 04APR2022 Lot: 70050710

TEST	SPECIFICATIONS	RESULTS
Appearance	Report results	Clear and colorless
Molecular Weight Determination by MALDI-MS	Report results	46.738 kDa
SDS-PAGE Analysis ¹	Protein band of interest represents > 90% of total staining intensity	Dominant band of ~ 50 to 60 kDa accounting for > 94% of total staining intensity (Figure 1)
Protein Concentration by Bicinchoninic Acid Assay	Report results	0.57 mg per mL
Final Product		
Amount per vial	Report results	188 µg
Volume per vial	Report results	330 µL
Functional Activity Western Blot Analysis using Anti-His Mab ²	Report results	Reactive (Figure 2)
Endotoxin Content (Limulus Amoebocyte Lysate)	Report results	< 8.77 EU per mg
Filtration	0.2 µm sterile filtered	0.2 µm sterile filtered

¹Fusion protein runs high on SDS-PAGE

Figure 1: SDS-PAGE Analysis



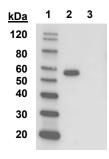
Lane 1: Precision Plus Protein™ Standard

Lane 2: Positive control, BSA (1.0 µg)

Lane 3: Positive control, BSA (2.0 µg)

Lane 4: NR-51404 (1.0 µg) Lane 5: NR-51404 (2.0 µg)

Figure 2: Western Blot Analysis



Lane 1: MagicMark™ XP Protein Standard

Lane 2: NR-51404 (0.5 µg)

Lane 3: BSA (0.5 µg)

BEI Resources www.beiresources.org E-mail: contact@beiresources.org Tel: 800-359-7370

Fax: 703-365-2898

²Using a 1:1000 dilution of mouse monoclonal anti-histidine tag (R&D Systems, Cat. No. MAB 050-100) as primary antibody and a 1:1000 dilution of HRP-conjugated goat anti-mouse IgG (R&D Systems, Cat. No. HAF007) as secondary antibody



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/Sonia Bjorum Brower/ Sonia Bjorum Brower

28 NOV 2022

Technical Manager or designee, ATCC Federal Solutions

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Tel: 800-359-7370

Fax: 703-365-2898