Certificate of Analysis for NR-51405

Streptococcus pneumoniae Family 2, Clade 4 Pneumococcal Surface Protein A (PspA UAB100) with C-Terminal Histidine Tag, Recombinant from Escherichia coli

Catalog No. NR-51405

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

Product Description:

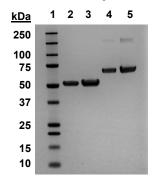
A recombinant form of the pneumococcal surface protein A (PspA UAB100) from *Streptococcus pneumoniae* (S. pneumoniae) Family 2, Clade 4. The recombinant PspA UAB100 containing a C-terminal hexahistidine tag was expressed in *Escherichia coli* BL21(DE3) pLysS and purified by IMAC/Ni⁺⁺ affinity chromatography.

Lot: 70049117 Manufacturing Date: 09FEB2022

TEST	SPECIFICATIONS	RESULTS
Appearance	Report results	Clear and colorless
Molecular Weight Determination by MALDI-MS	Report results	40.768 kDa
SDS-PAGE Analysis ¹	Protein band of interest represents > 90% of total staining intensity	Dominant band of ~ 50 kDa accounting for > 95% of total staining intensity (Figure 1)
Protein Concentration by Bicinchoninic Acid Assay	Report results	952 μg per mL
Final Product		
Amount per vial	Report results	238 μg
Volume per vial	Report results	0.25 mL
Functional Activity Western Blot Analysis using Anti-His Mab ²	Report results	Positive (Figure 2)
Endotoxin Content (Limulus Amoebocyte Lysate Assay)	Report results	21.53 EU per mg
Filtration	0.2 μm sterile filtered	0.2 µm sterile filtered

¹Fusion protein runs high on SDS-PAGE (between 49 kDa and 69 kDa)

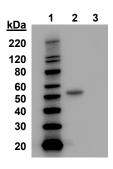
Figure 1: SDS-PAGE Analysis of NR-51405



Lane 1: MW Markers Lane 2: NR-51405 (1 μg) Lane 3: NR-51405 (2.0 μg)

Lane 4: Positive control, BSA (1 µg) Lane 5: Positive control, BSA (2.0 µg)

Figure 2: Western Blot Analysis of NR-51405



Lane 1: MW Markers Lane 2: NR-51405 (0.5 μg) Lane 3: BSA (0.5 μg)

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²Using a 1:1000 dilution of mouse monoclonal anti-histidine tag (Takara, Cat. No. 631212) 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

18 SEP 2022

Technical Manager or designee, ATCC Federal Solutions

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