

Mpt64, Recombinant Protein Reference Standard

Catalog No. NR-49435

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Product Description: NR-49435 is a recombinant form of the secreted immunogenic protein Mpt64 (also referred to as mpb64) from *Mycobacterium tuberculosis*. The recombinant protein consists of the native protein sequence in addition to a hexa-histidine tag. Mpt64 was expressed in *Escherichia coli* and purified using standard chromatographic techniques followed by endotoxin removal procedures.

Lot¹: 70006290

Manufacturing Date: 28JUN2017

TEST	SPECIFICATIONS	RESULTS
Appearance	Report results	White powder
SDS-PAGE (Coomassie Blue Stain)²	Dominant band ~ 20 kDa > 90% pure	Dominant band of ~ 25 kDa accounts for > 90% of total staining intensity (Figure 1)
Concentration by Bicinchoninic Acid Protein Assay^{2,3}	Report results	0.89 mg per mL
Final Product² Quantity per vial Volume per vial	Report results Report results	0.89 mg 1 mL
Western Blot Analysis² Monoclonal anti-hexa-histidine tag ⁴	Reactive	Reactive (Figure 2)
Endotoxin Content² Limulus Amoebocyte Lysate Assay ⁵	1 to 10000 EU/mg	< 22.5 EU/mg protein
Sterility⁶	0.2 µm sterile-filtered	0.2 µm sterile-filtered

¹Mpt64 was harvested and purified from *E. coli* BL21 (DE3) pLysS cells transformed with BEI Resources NR-13273 lot 03.EC.08.026.

²Testing was performed on vial, lyophilized material reconstituted with 1 mL 10 mM ammonium bicarbonate per vial.

³Using BSA as a standard

⁴Clontech, Catalog Number 631212 (1:1000 dilution)

⁵Endosafe[®] PTS Cartridge, Charles River Laboratories, Inc., Catalog Number PTSR005F

⁶Material was sterile-filtered prior to vialing and lyophilization.

Date: 31 AUG 2017

Signature:



BEI Resources Authentication

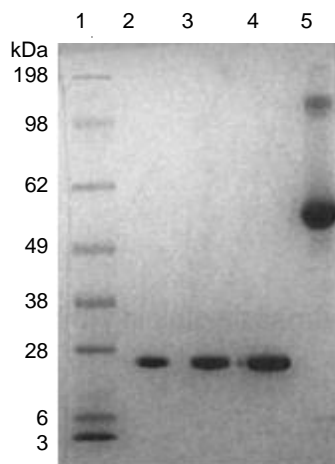
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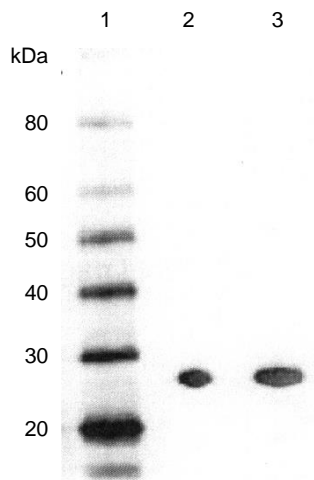


Figure 1: SDS-PAGE of Mpt64



Lane 1: SeeBlue® Plus2 Protein Standard
Lane 2: NR-49435, 1 µg
Lane 3: NR-49435, 2 µg
Lane 4: NR-49435, 4 µg
Lane 5: BSA, 4 µg

Figure 2: Western Blot with Monoclonal Anti-Histidine Tag



Lane 1: MagicMark™ XP Protein Standard
Lane 2: NR-49435, 0.5 µg
Lane 3: NR-49435, 1.0 µg