

Anthrax Lethal Factor (LF-A), Native Sequence, Recombinant from *Bacillus anthracis*
Catalog No. NR-28544

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

Product Description: Recombinant anthrax LF-A was produced in a non-sporulating avirulent strain of *Bacillus anthracis* lacking both of the wild type plasmids, pX01 and pX02. Recombinant LF-A was purified using conventional chromatographic techniques. The resulting purified protein lacks all other anthrax virulence factors. **LF-A has been reported to have 3-fold higher potency than LF-HMA in cell culture cytotoxicity assays and in rat lethality studies.**

Lot: 1693A1
Manufacturing Date: 22JUN2011

TEST	SPECIFICATIONS	RESULTS
Appearance ^{1,2}	Clear and colorless	Clear and colorless
SDS-PAGE (Coomassie Blue Densitometer Scan) ²	~ 80–90 kDa band is ≥ 90% of total density	~ 80–90 kDa band is 97% of total density
Electrospray Mass Spectrometry ²	90,226 ± 45 Da	90,246 Da
N-Terminal Analysis ²	Correct N-terminus to 6 residues	Correct N-terminus to 10 residues
Concentration by Modified Bradford Assay ^{1,3}	Report results	1.0 mg per mL
Functional Activity Cleavage of MAPKKide® Cytotoxicity assay [determination of effective concentration (EC ₅₀) by titration of LF-A in J774A.1 macrophage cells] ²	Report results LF-A with 1 µg/mL PA: EC ₅₀ ≤ 500 pM	0.154 units/mg 14 pM
Microbial Content ²	No detectable colony-forming units	No detectable colony-forming units
Endotoxin Content (Limulus Amoebocyte Lysate Assay)	< 0.5 EU endotoxin per µg protein	0.015 EU endotoxin per µg protein
Absorbance Ratio (OD₂₈₀/OD₂₆₀) ²	≥ 1.7	2.1
Absorbance (OD₃₂₀) ²	≤ 10	0.0083

¹Prior to lyophilization

²Performed on another lot of NR-28544 that was prepared from the same bulk material as this lot

³Using BSA as a standard

Date: 30 MAY 2017

Signature:


BEI Authentication or designee

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