

Certificate of Analysis for NR-723

Anthrax Lethal Factor (LF-HMA), Recombinant from Bacillus anthracis

Catalog No. NR-723

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

Recombinant anthrax LF-HMA was produced in a non-sporulating **Product Description:** avirulent strain of Bacillus anthracis lacking both of the wild type plasmids, pX01 and pX02. Recombinant LF-HMA was purified using conventional chromatographic techniques. The resulting purified protein lacks all other anthrax virulence factors.

Manufacturing Date¹: 01AUG2002 Lot: 1722B13

TEST	SPECIFICATIONS	RESULTS
Appearance ²	Clear and colorless	Clear and colorless
SDS-PAGE (Coomassie Blue Densitometer Scan)	~ 80–90 kDa band is ≥ 90% of total density	~ 80–90 kDa band is 92% of total density
Electrospray Mass Spectrometry	Report results	Comparable to control
Concentration by modified Bradford Assay ^{2,3}	Report results	0.97 mg per mL
Functional Activity Cleavage of MAPKKide®	Report results	0.166 units/mg
Cytotoxicity assay [determination of effective concentration (EC ₅₀) by titration of LF-HMA in J774A.1 macrophage cells]	LF-HMA with 1 μg/mL PA: EC ₅₀ ≤ 500 pM	21 pM
Microbial Content	No detectable colony-forming units	No detectable colony-forming units
Endotoxin Content (Limulus Amoebocyte Lysate Assay)	< 0.5 EU endotoxin per µg protein	0.00124 EU endotoxin per μg protein
Absorbance Ratio (OD ₂₈₀ /OD ₂₆₀)	≥ 1.7	2.1
Absorbance (OD ₃₂₀)	≥ 0.1	0.0120

Stored as bulk LF-HMA from August, 2002 until June, 2011. Bulk was aliquoted and lyophilized on 22 June 2011.

Date: 05 JUL 2012

Signature: Dorothy C. Young

Title: Technical Manager, BEI Authentication or designee

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected by the contractor to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC[®]'s knowledge.

ATCC® is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.

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

Fax: 703-365-2898

NR-723 1722B13 05JUL2012

²Prior to lyophilization

³Using BSA as a standard