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Product #176A

CERTIFICATE OF ANALYSIS
ANTHRAX MUTANT LETHAL FACTOR (LF), RECOMBINANT
MUTANT E687C from *Bacillus anthracis*
Lot #1761AA

Contents

Each vial contains 0.1 mg of mutant lethal factor of *Bacillus anthracis*. This LF mutant, E687C, has no enzymatic activity. When reconstituted with 0.1 ml of water, each vial contains 0.1 mg protein in 5 mM HEPES, 50 mM NaCl, pH 7.5. Read the following recommendations prior to reconstituting this material. **Handle the product gently; mix by inversion, do not vortex.**

Concentration

Protein concentration was determined by absorbance at 280 nm using an extinction coefficient of 0.812 for 1 mg/ml.¹

Purity

When examined on 10% polyacrylamide gels in the presence of SDS, this preparation migrates as two major bands with apparent molecular weights of 88,000 and 90,000 daltons.

Activity

In immunodiffusion studies, anthrax mutant lethal factor shows similar immuno-precipitation as anthrax lethal factor when reacted against a specific antiserum to anthrax lethal factor. LF mutant does not cleave the synthetic peptide substrate MAPKKide[®]. No cytotoxicity was detected with 1 µg/ml (11 nM) LF mutant in the presence of 1 µg/ml (12 nM) protective antigen when tested on J774.1A cells.

Storage

This product is packaged aseptically and is supplied as a lyophilized powder which has been stoppered under vacuum. Store at 2-8°C prior to reconstitution.

Handling

This product is not known to be hazardous. Good laboratory technique should be employed in the safe handling of this product. Wear appropriate laboratory attire including a lab coat, gloves, and safety glasses. Nitrile gloves are recommended to use when handling lyophilized material.

This product is intended for research purposes only. It is not intended for use in humans or as a diagnostic agent. List Biological Laboratories, Inc. is not liable for any damages resulting from the misuse or handling of this product.

FOR RESEARCH PURPOSES ONLY. NOT FOR HUMAN USE.

(continued)

References

1. <http://www.expasy.ch/tools/protparam.html>
2. Leppla, S.H. (1988) *Meth. Enz.* **165**, 103-116.
3. Stephen Little, personal communication
4. Glutamax by Invitrogen/Gibco, www.invitrogen.com
5. Ala-Gln by Sigma, www.sigmaaldrich.com

Production: VTK Date: 4/17/12 Management: NS Date: 4/17/12 QA/QC: GA P Date: 4/17/12