PRODUCT INFORMATION

Anthrax Lethal Factor (recombinant from *Bacillus anthracis*), Native Sequence (LF-A)

Item No. 28874

Overview and Properties

Contents:	Each vial contains 0.2 mg of recombinant lethal factor from *Bacillus anthracis*, native sequence in 0.2 ml of 5 mM HEPES, 50 mM sodium chloride, pH 7.5.
Storage:	-20°C (as supplied)
Stability:	≥4 years
Purity:	≥95% (estimated by SDS-PAGE)
Item Origin:	Bacterium/*Bacillus anthracis*

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Description

Anthrax lethal factor is one component of a tripartite protein toxin secreted into host systems during anthrax infection by *B. anthracis*.[1] The toxin is a mixture of three protein components: Lethal factor, edema factor, and protective antigen. Lethal factor is a zinc-dependent metalloprotease that disrupts MAPK signaling by cleaving MAPK kinases near the N-terminal end. It requires protective antigen (PA), but not edema factor (EF), for its lethality. LF-A, in combination with PA, is lethal to RAW 264.7 cells (EC_{50} = 1.2 ng/ml) and rats when administered at doses of 10 and 100 µg/animal.[2]

References

1. Pannifer, A.D., Wong, T.Y., Schwarzenbacher, R., *et al.* Crystal structure of the anthrax lethal factor. *Nature* **414(6860)**, 229-233 (2001).
2. Gupta, P.K., Moayeri, M., Crown, D., *et al.* Role of N-terminal amino acids in the potency of anthrax lethal factor. *PLoS One* **3(9)**, e3130 (2008).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent *via* email to your institution.

WARRANTY AND LIMITATION OF REMEDY
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