



## Rabbit Anti-Bacillus anthracis lethal factor antibody

SL12564R

<b>Product Name:</b>	Bacillus anthracis lethal factor
<b>Chinese Name:</b>	炭疽杆菌致死因子LF抗体
<b>Alias:</b>	Anthrax lethal factor; Anthrax lethal toxin endopeptidase component; Anthrax LF; bacillus anthracis lethal factor; Lef; LF; LEF BACAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Anthrax LF (Lethal Factor) produced by Bacillus anthracis
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	90kDa
<b>Cellular localization:</b>	Secretory protein
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from Bacillus anthracis lethal factor:501-600/809
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	The protease enzyme Lethal Factor (LF) is one of the three proteins (LF, EF & PA) composing the anthrax toxin produced by Bacillus anthracis, a bacteria which can infect many mammalian species and that may be fatal. LF is not toxic by itself, but

when associated with Protective Antigen (PA), can then gain entry to cells. Once inside the cell, LF then cleaves the N terminal of most dual specificity mitogen activated protein kinase kinases (MAPKKs or MAP2Ks) (except for MAP2K5). Cleavage invariably occurs within the N terminal proline rich region preceding the kinase domain, thus disrupting a sequence involved in directing specific protein protein interactions necessary for the assembly of signaling complexes. There may be other cytosolic targets of LF involved in cytotoxicity. The proteasome may mediate a toxic process initiated by LF in the cell cytosol involving degradation of unidentified molecules that are essential for macrophage homeostasis. This is an early step in LF intoxication, but it is downstream of the cleavage by LF of MEK1 or other putative substrates.

**Function:**

One of the three proteins composing the anthrax toxin, the agent which infects many mammalian species and that may cause death. LF is the lethal factor that, when associated with PA, causes death. LF is not toxic by itself. It is a protease that cleaves the N-terminal of most dual specificity mitogen-activated protein kinase kinases (MAPKKs or MAP2Ks) (except for MAP2K5). Cleavage invariably occurs within the N-terminal proline-rich region preceding the kinase domain, thus disrupting a sequence involved in directing specific protein-protein interactions necessary for the assembly of signaling complexes. There may be other cytosolic targets of LF involved in cytotoxicity. The proteasome may mediate a toxic process initiated by LF in the cell cytosol involving degradation of unidentified molecules that are essential for macrophage homeostasis. This is an early step in LeTx intoxication, but it is downstream of the cleavage by LF of MEK1 or other putative substrates.

**Subunit:**

Anthrax toxins are composed of three distinct proteins, a protective antigen (PA), a lethal factor (LF) and an edema factor (EF). None of these is toxic by itself. PA+LF forms the lethal toxin (LeTx); PA+EF forms the edema toxin (EdTx).

**Subcellular Location:**

secreted

**Similarity:**

Belongs to the peptidase M34 family.

**Database links:**

UniProtKB/Swiss-Prot: P15917.2

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.