



Rabbit Anti-B. anthracis LF (Intermediate) Polyclonal antibody (DPAB3564)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Polyclonal Antibody to Anthrax Lethal Factor was raised against a synthetic peptide corresponding to 16 amino acids in the middle of the Anthrax lethal factor protein.
Target	B. anthracis Lethal Factor
Immunogen	Anthrax Lethal Factor (Intermediate Domain) Peptide
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	B. anthracis
Purification	Affinity chromatography purified via peptide column
Conjugate	Unconjugated
Applications	ELISA
Size	100 µg
Buffer	Antibody is supplied in PBS containing 0.02% sodium azide
Preservative	0.02% Sodium Azide
Storage	Stored at 4°C, stable for one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

BACKGROUND

Introduction

Anthrax infection is initiated by the inhalation, ingestion, or cutaneous contact with *Bacillus anthracis* endospores. *B. anthracis* produces three polypeptides that comprise the anthrax toxin: protective antigen (PA), lethal factor (LF), and edema factor (EF). PA binds to two related proteins on the cell surface; these are termed tumor epithelial marker 8 (TEM8)/anthrax toxin receptor (ATR) and capillary morphogenesis protein 2 (CMG2), although it is still unclear which is physiologically relevant. Following PA binding to its receptor, PA is cleaved into two fragments by a furin-like protease. The bound fragment binds both LF and EF; the resulting complex is then endocytosed which allows the translocation of LF and EF into the cytoplasm. LF is the primary toxin of anthrax and functions as a highly specific protease that cleaves members of the mitogen-activated protein kinase kinase (MAPKK) family near their amino terminus, interfering with MAPK signaling and inducing apoptosis.

Keywords

Anthrax Lethal Factor (IN); Anthrax LF; Anthrax lethal factor; *Bacillus anthracis* (Anthrax) Lethal Factor (LF), C-terminal; *B. Anthracis* (LF); *Bacillus anthracis* (Anthrax) Lethal Factor (LF), Middle region; Bacteria; Firmicutes; Bacilli; Bacillales; Bacil
