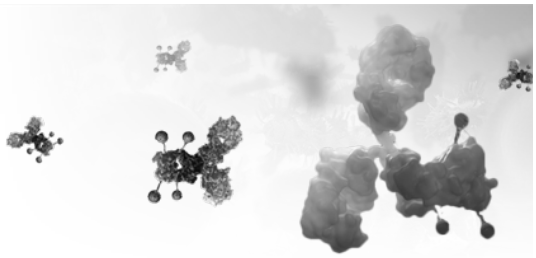

Anti-Anthrax Edema Factor (C-terminal) polyclonal antibody (DPAB4235)

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

PRODUCT INFORMATION

Product Overview	Polyclonal Antibody to Anthrax Edema Factor.
Immunogen	Rabbit polyclonal Anthrax EF antibody was raised against a synthetic peptide corresponding to 16 amino acids near the carboxy terminus of the Anthrax edema factor protein.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	N/A
Purification	Affinity chromatography purified via peptide column.
Conjugate	Unconjugated
Applications	ELISA
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tablet
Format	Antibody is supplied in PBS containing 0.02% sodium azide.
Preservative	0.02% Sodium Azide
Storage	Antibody can be stored at 4ºC, 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

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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. EF is a calmodulin and Ca2+-dependent adenylate cyclase responsible for the edema seen in the disease. It is thought to benefit the B. anthracis bacteria by inhibiting cells of the host immune system.
Keywords	Anthrax EF; Anthrax Edema Factor; Anthrax; Adenylyl cyclase; Anthrax edema toxin adenylate cyclase component; ATP pyrophosphate lyase; Bacillus anthracis EF; Calmodulin sensitive adenylate cyclase; Cya; Edema factor; EF; Anthrax EF peptide; TEM8 peptide; Blocking Peptide; Anthrax PA (IN); Anthrax PA (CT); Anthrax LF (IN); Anthrax LF (CT); ATR (IN); Firmicutes; Bacilli; Bacillales; Bacillaceae; Bacillus; B. anthracis; Bacillus anthracis.

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