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Anti-Elastase/ELANE/ELA2 Picoband Antibody

Catalog # ABO11676

Specification

Anti-Elastase/ELANE/ELA2 Picoband Antibody - Product Information

Application	**WB, IHC**
Primary Accession	Q3UP87
Host	**Rabbit**
Reactivity	**Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Neutrophil elastase(ELANE) detection. Tested with WB, IHC-P in Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Elastase/ELANE/ELA2 Picoband Antibody - Additional Information

Gene ID 50701

Other Names
Neutrophil elastase, 3.4.21.37, Elastase-2, Leukocyte elastase, Elane, Ela2

Calculated MW
28648 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Mouse, Rat, By Heat

Western blot, 0.1-0.5 µg/ml, Mouse

Protein Name
Neutrophil elastase

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E. coli-derived mouse Elastase/ELANE/ELA2 recombinant protein (Position: S27-N265). Mouse Elastase/ELANE/ELA2 shares 92% amino acid (aa) sequence identity with rat Elastase/ELANE/ELA2.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution,**

at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Anti-Elastase/ELANE/ELA2 Picoband Antibody - Protein Information

Name Elane

Synonyms Ela2

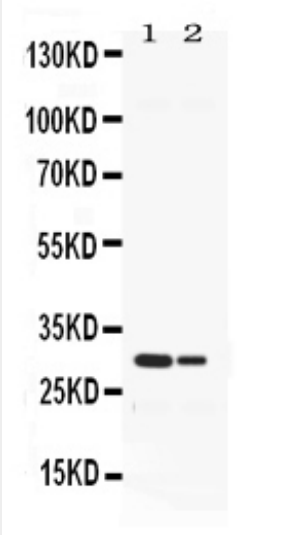
Function
Serine protease that modifies the functions of natural killer cells, monocytes and granulocytes. Inhibits C5a-dependent neutrophil enzyme release and chemotaxis (By similarity). Promotes blood coagulation (PubMed:20676107). Through the activation of the platelet fibrinogen receptor integrin alpha-IIb/beta-3, potentiates platelet aggregation induced by a threshold concentration of cathepsin G (CTSG) (By similarity). Cleaves and thus inactivates tissue factor pathway inhibitor (TFPI) (By similarity). Capable of killing E.coli; probably digests outer membrane protein A (ompA) in E.coli (PubMed:10947984).

Anti-Elastase/ELANE/ELA2 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Elastase/ELANE/ELA2 Picoband Antibody - Images



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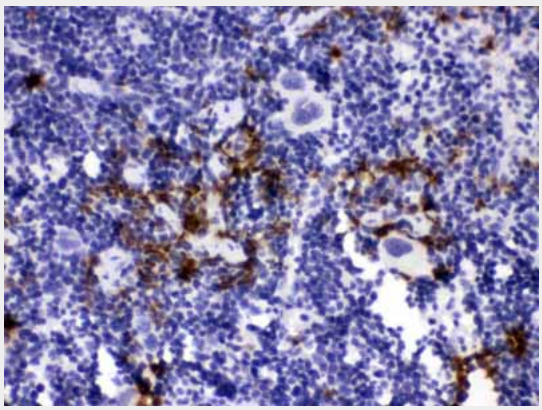
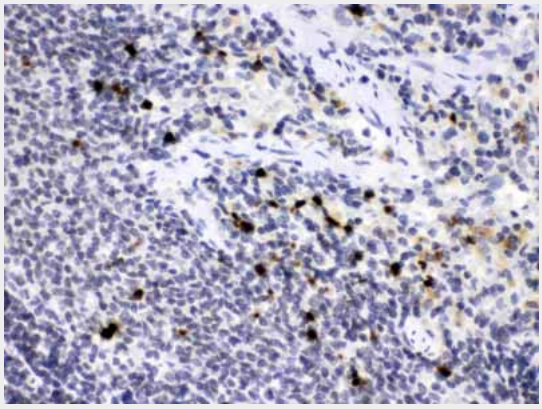
Western blot analysis of Elastase/ELANE/ELA2 expression in mouse bone extract (lane 1) and mouse spleen extract (lane 2). Elastase/ELANE/ELA2 at 29KD was detected using rabbit anti-Elastase/ELANE/ELA2 Antigen Affinity purified polyclonal antibody (Catalog # ABO11676) at 0.5 Î¼g/mL. The blot was developed using chemiluminescence (ECL) method .



Elastase/ELANE/ELA2 was detected in paraffin-embedded sections of mouse spleen tissues using rabbit anti- Elastase/ELANE/ELA2 Antigen Affinity purified polyclonal antibody (Catalog # ABO11676) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .



Elastase/ELANE/ELA2 was detected in paraffin-embedded sections of rat spleen tissues using rabbit anti- Elastase/ELANE/ELA2 Antigen Affinity purified polyclonal antibody (Catalog # ABO11676) at 1 ??g/mL. The immunohistochemical section was developed using SABC method .

Anti-Elastase/ELANE/ELA2 Picoband Antibody - Background

Neutrophil elastase is a serine protease of neutrophil and monocyte granules. Its key physiologic role is in innate host defense, but it can also participate in tissue remodeling and possesses secretagogue actions important to local inflammatory responses. Elastases form a subfamily of serine proteases that hydrolyze many proteins in addition to elastin. Humans have six elastase genes which encode structurally similar proteins. The encoded preproprotein is proteolytically processed to generate the active protease. Following activation, this protease hydrolyzes proteins within specialized neutrophil lysosomes, called azurophil granules, as well as proteins of the extracellular matrix. This protein also degrades the outer membrane protein A (OmpA) of E. coli as well as the virulence factors of such bacteria as Shigella, Salmonella and Yersinia. Mutations in this gene are associated with cyclic neutropenia and severe congenital neutropenia (SCN). This gene is present in a gene cluster on chromosome 19.