

## Basic Information

Product Name	Anti-ELA2/ELANE Antibody	
Gene Name	ELANE	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	mouse, rat	
Tested Application	WB, IHC, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
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.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	29 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Enzyme linked immunosorbent assay (ELISA): 1:100-1000 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied.

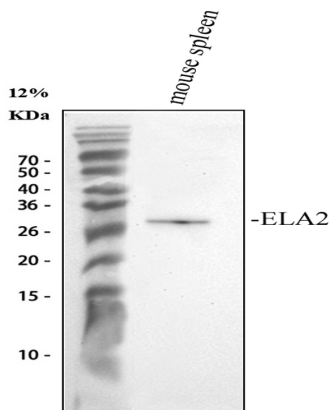
## Background Information

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.

## Reference

Anti-ELA2/ELANE Antibody被引用在4文献中。

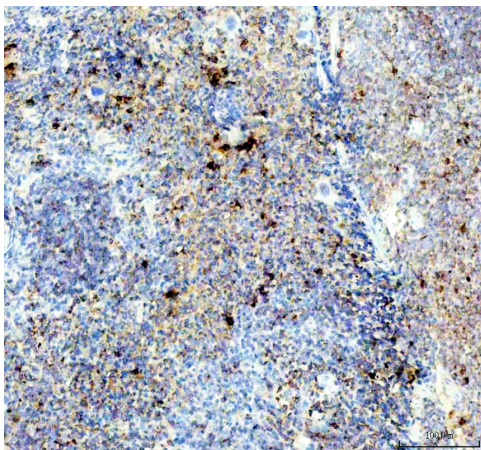
## Selected Validation Data



Western blot analysis of ELA2/ELANE using anti-ELA2/ELANE antibody (PB1114). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: mouse spleen tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-ELA2/ELANE antigen A03957-Aen affinity purified polyclonal antibody (PB1114) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for ELA2/ELANE at approximately 29 kDa. The expected band size for ELA2/ELANE is at 29 kDa.



IHC analysis of ELA2/ELANE using anti-ELA2/ELANE antibody (PB1114). ELA2/ELANE was detected in a paraffin-embedded section of mouse spleen tissue. The tissue section was incubated with rabbit anti-ELA2/ELANE Antibody (PB1114) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.