
Product Name: ELANE Mouse Monoclonal Antibody**Catalog #: AMM81959**

For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,IHC,ELISA,FC
Reactivity	Human,Monkey
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in PBS with 0.05% sodium azide
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:200-1:1000,ELISA 1:5000-1:20000,FC 1:200-1:400
Molecular Weight	28.5kDa

Antigen Information

Gene Name	ELANE
Alternative Names	GE; NE; HLE; HNE; ELA2; SCN1; PMN-E
Gene ID	1991.0
SwissProt ID	P08246
Immunogen	Purified recombinant fragment of human ELANE (AA: 140-267) expressed in E. Coli.

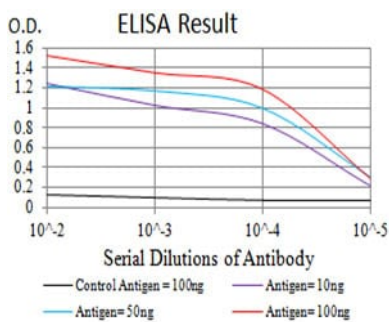
Background

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

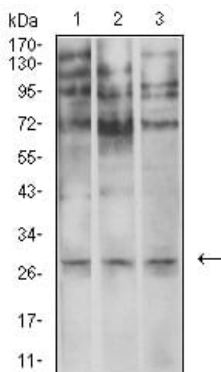
granules, as well as proteins of the extracellular matrix. The enzyme may play a role in degenerative and inflammatory diseases through proteolysis of collagen-IV and elastin. This protein also degrades the outer membrane protein A (OmpA) of *E. coli* as well as the virulence factors of such bacteria 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.

Research Area

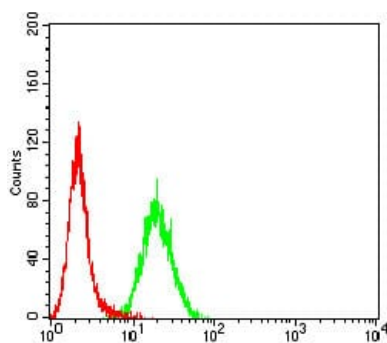
Image Data



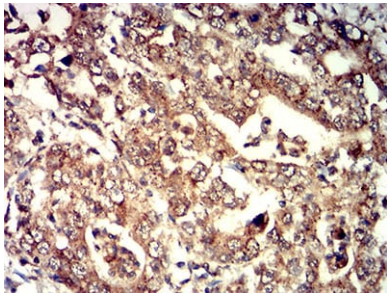
Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)



Western blot analysis using ELANE mouse mAb against U937 (1), SPC-A-1 (2), and COS7 (3) cell lysate.



Flow cytometric analysis of HeLa cells using ELANE mouse mAb (green) and negative control (red).



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissues using ELANE mouse mAb with DAB staining.