

Neutrophil elastase Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12084a

Specification

Neutrophil elastase Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	P08246
Other Accession	NP_001963.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	28-58

Neutrophil elastase Antibody (N-term) - Additional Information

Gene ID 1991

Other Names

Neutrophil elastase, Bone marrow serine protease, Elastase-2, Human leukocyte elastase, HLE, Medullasin, PMN elastase, ELANE, ELA2

Target/Specificity

This Neutrophil elastase antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 28-58amino acids of human Neutrophil elastase.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Neutrophil elastase Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Neutrophil elastase Antibody (N-term) - 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 (PubMed:[15140022](#)). Promotes cleavage of GSDMB, thereby inhibiting pyroptosis (PubMed:[36899106](#)). Capable of killing E.coli but not S.aureus in vitro; digests outer membrane protein A (ompA) in E.coli and K.pneumoniae (PubMed:[10947984](#)).

Cellular Location

Cytoplasmic vesicle, phagosome. Note=Localized in phagolysosomes following ingestion of E.coli by neutrophils

Tissue Location

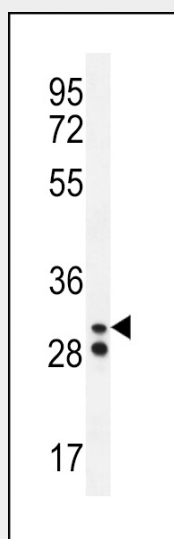
Bone marrow cells. Neutrophil (PubMed:10947984).

Neutrophil elastase Antibody (N-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Neutrophil elastase Antibody (N-term) - Images



Neutrophil elastase Antibody (N-term) (Cat. #AP12084a) western blot analysis in A2058 cell line lysates (35ug/lane). This demonstrates the Neutrophil elastase antibody detected the Neutrophil elastase protein (arrow).

Neutrophil elastase Antibody (N-term) - Background

Elastases form a subfamily of serine proteases that hydrolyze many proteins in addition to elastin. Humans have six elastase genes which encode the structurally similar proteins. The

product of this gene hydrolyzes proteins within specialized neutrophil lysosomes, called azurophil granules, as well as proteins of the extracellular matrix following the protein's release from activated neutrophils. The enzyme may play a role in degenerative and inflammatory diseases by its proteolysis of collagen-IV and elastin of the extracellular matrix. This protein 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 clustered with other serine protease gene family members, azurocidin 1 and proteinase 3 genes, at chromosome 19pter. All 3 genes are expressed coordinately and their protein products are packaged together into azurophil granules during neutrophil differentiation.

Neutrophil elastase Antibody (N-term) - References

Kallquist, L., et al. Exp. Cell Res. 316(19):3182-3196(2010)
Rabai, G., et al. Thromb. Res. 126 (2), E94-E101 (2010) :
Newburger, P.E., et al. Pediatr Blood Cancer 55(2):314-317(2010)
Hayashi, M., et al. J Nippon Med Sch 77(2):80-85(2010)
Hector, A., et al. Mediators Inflamm. 2010, 809591 (2010) :