

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

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**Neutrophil elastase Antibody (N-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">P08246</a>
Other Accession	<a href="#">NP_001963.1</a>
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

E~~Use at an assay dependent concentration.

**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](#)). 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) (PubMed:[25211214](#), PubMed:[9111081](#)). Cleaves and thus inactivates tissue factor pathway inhibitor (TFPI) (PubMed:[20676107](#), PubMed:[25211214](#)). 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

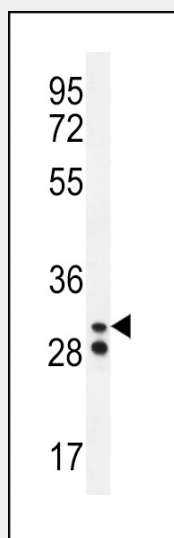
Bone marrow cells. Neutrophil (PubMed:10947984).

### 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) :