

**Anti-Neutrophil Elastase ELANE Rabbit Monoclonal Antibody**  
**Catalog # ABO14267****Specification**

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**Anti-Neutrophil Elastase ELANE Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC, IF, ICC, FC
Primary Accession	<a href="#">P08246</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-Neutrophil Elastase ELANE Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human.

**Anti-Neutrophil Elastase ELANE Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 1991

**Other Names**

Neutrophil elastase, 3.4.21.37, Bone marrow serine protease, Elastase-2, Human leukocyte elastase, HLE, Medullasin, PMN elastase, ELANE, ELA2

**Calculated MW**

28518 MW KDa

**Application Details**

WB 1:500-1:2000<br>IHC 1:100-1:500<br>ICC/IF 1:50-1:200<br>FC 1:30

**Tissue Specificity**

Bone marrow cells.

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human Neutrophil Elastase

**Purification**

Affinity-chromatography

**Storage**

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

**Anti-Neutrophil Elastase ELANE Rabbit Monoclonal 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 (PubMed:<a href="http://www.uniprot.org/citations/15140022" target="\_blank">15140022</a>). Promotes cleavage of GSDMB, thereby inhibiting pyroptosis (PubMed:<a href="http://www.uniprot.org/citations/36899106" target="\_blank">36899106</a>). Promotes blood coagulation (PubMed:<a href="http://www.uniprot.org/citations/20676107" target="\_blank">20676107</a>). 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:<a href="http://www.uniprot.org/citations/25211214" target="\_blank">25211214</a>, PubMed:<a href="http://www.uniprot.org/citations/9111081" target="\_blank">9111081</a>). Cleaves and thus inactivates tissue factor pathway inhibitor (TFPI) (PubMed:<a href="http://www.uniprot.org/citations/20676107" target="\_blank">20676107</a>, PubMed:<a href="http://www.uniprot.org/citations/25211214" target="\_blank">25211214</a>). Capable of killing E.coli but not S.aureus in vitro; digests outer membrane protein A (ompA) in E.coli and K.pneumoniae (PubMed:<a href="http://www.uniprot.org/citations/10947984" target="\_blank">10947984</a>).

**Cellular Location**

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

**Tissue Location**

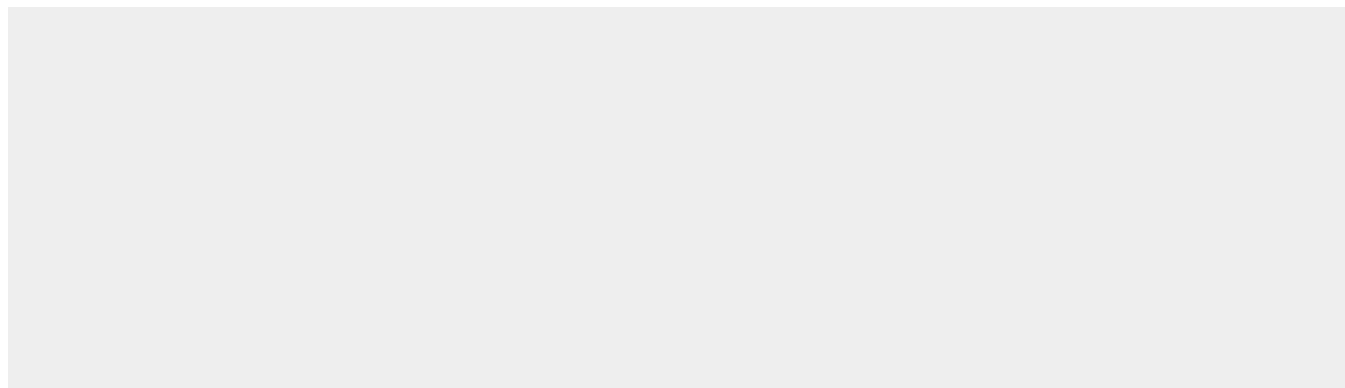
Bone marrow cells. Neutrophil (PubMed:10947984).

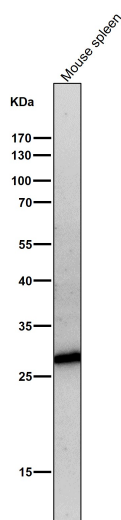
**Anti-Neutrophil Elastase ELANE Rabbit Monoclonal Antibody - Protocols**

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

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

**Anti-Neutrophil Elastase ELANE Rabbit Monoclonal Antibody - Images**





All lanes use the Antibody at 1:5K dilution for 1 hour at room temperature.

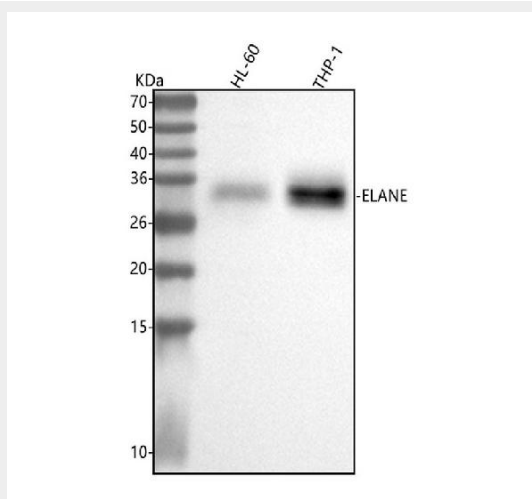


Figure 1. Western blot analysis of Neutrophil Elastase using anti-Neutrophil Elastase antibody (M01607).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HL-60 whole cell lysates,

Lane 2: human THP-1 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Neutrophil Elastase antigen affinity purified monoclonal antibody (Catalog # M01607) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Neutrophil Elastase at approximately 29 kDa. The expected band size for Neutrophil Elastase is at 29 kDa.