10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Neutrophil Elastase ELANE Rabbit Monoclonal Antibody

Catalog # ABO14267

Specification

Anti-Neutrophil Elastase ELANE Rabbit Monoclonal Antibody - Product Information

Application	**WB, IHC, IF, ICC, FC**
Primary Accession	P08246
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
IHC 1:100-1:500
ICC/IF 1:50-1:200
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: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).

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 Cytomety
- Cell Culture

Anti-Neutrophil Elastase ELANE Rabbit Monoclonal Antibody - Images

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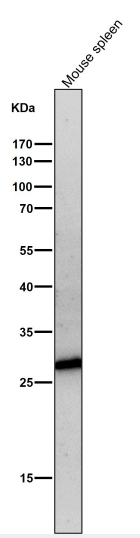

All lanes use the Antibody at 1:5K dilution for 1 hour at room temperature.

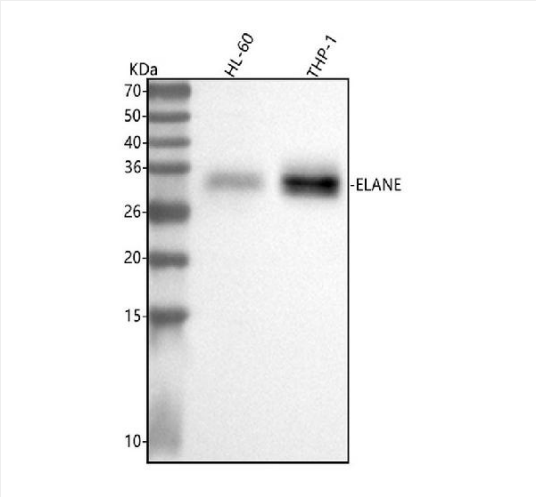

Figure 1. Western blot analysis of Neutrophil Elastase using anti-Neutrophil Elastase antibody (M01607).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
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.