

ELANE
Purified Mouse Monoclonal Antibody
Catalog # AO2644a**Specification**

ELANE - Product Information

Application	WB, IHC, ICC, E
Primary Accession	P08246
Reactivity	Human, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG1
Calculated MW	28.5kDa KDa

Immunogen

Purified recombinant fragment of human ELANE (AA: 140-267) expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide

ELANE - Additional Information

Gene ID 1991

Other Names

GE; NE; HLE; HNE; ELA2; SCN1; PMN-E

Dilution

WB~~ 1/500 - 1/2000

IHC~~1:100~500

ICC~~N/A

E~~ 1/10000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ELANE is for research use only and not for use in diagnostic or therapeutic procedures.

ELANE - 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).

ELANE - 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](#)

ELANE - Images

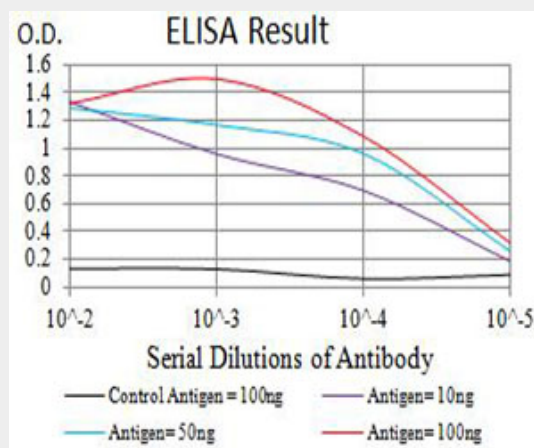


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

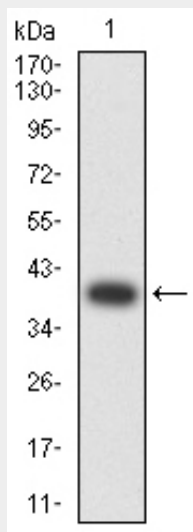


Figure 2: Western blot analysis using ELANE mAb against human ELANE (AA: 140-267) recombinant protein. (Expected MW is 39 kDa)

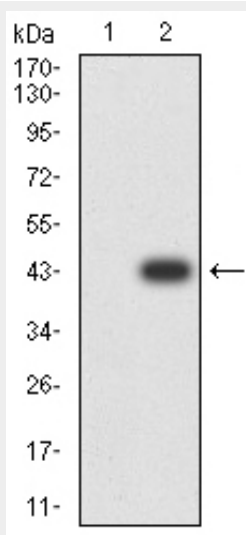


Figure 3: Western blot analysis using ELANE mAb against HEK293 (1) and ELANE (AA: 140-267)-hlgGFc transfected HEK293 (2) cell lysate.

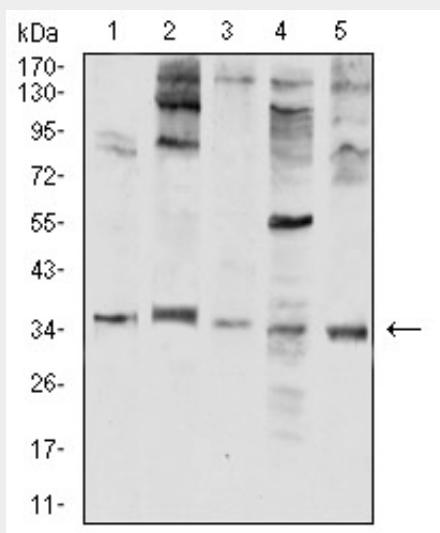


Figure 4: Western blot analysis using ELANE mouse mAb against HL-60 (1), THP-1 (2), MOLT4 (3), C6 (4), and K562 (5) cell lysate.

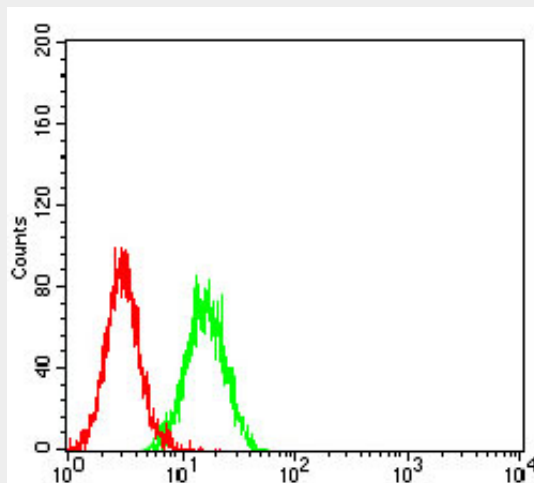


Figure 5: Flow cytometric analysis of K562 cells using ELANE mouse mAb (green) and negative control (red).

ELANE - References

1. *Pediatr Blood Cancer*. 2015 Dec;62(12):2229-31.
2. *Lung*. 2014 Aug;192(4):595-9.