

ELANE

Purified Mouse Monoclonal Antibody Catalog # AO2644a

Product Information

Application WB, IHC, ICC, E

Primary Accession
Reactivity
Human, Rat
Host
Mouse
Clonality
Monoclonal
Clone Names
Isotype
Mouse IgG1
Calculated MW

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

Coli.

Formulation Purified antibody in PBS with 0.05% sodium azide

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.

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:<u>9111081</u>). Cleaves and thus inactivates tissue factor pathway inhibitor (TFPI) (PubMed:<u>20676107</u>, PubMed:<u>25211214</u>). Capable of killing E.coli but not S.aureus in vitro; digests outer membrane protein A (ompA) in E.coli and K.pneumoniae (PubMed:<u>10947984</u>).

Cellular Location

Cytoplasmic vesicle, phagosome. Note=Localized in phagolysosomes following

ingestion of E.coli by neutrophils

Tissue Location

Bone marrow cells. Neutrophil (PubMed:10947984).

References

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

Images

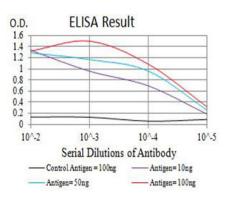


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

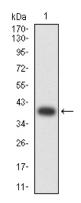


Figure 2:Western blot analysis using ELANE mAb against human ELANE (AA: 140-267) recombinant protein. (Expected MW is 39 kDa)

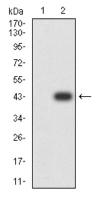
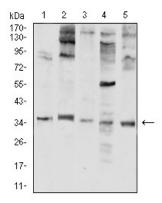


Figure 3:Western blot analysis using ELANE mAb against HEK293 (1) and ELANE (AA: 140-267)-hIgGFc transfected HEK293 (2) cell lysate.

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.



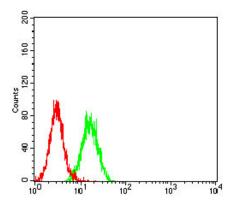


Figure 5:Flow cytometric analysis of K562 cells using ELANE mouse mAb (green) and negative control (red).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.