

ELANE

Purified Mouse Monoclonal Antibody Catalog # AO2660a

# **Product Information**

Application Primary Accession Reactivity Host Clonality Clone Names Isotype	WB, IHC, ICC, E <u>P08246</u> Human, Monkey Mouse Monoclonal 6B6B10 Mouse IgG1
Calculated MW	28518
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~~ 1/200 - 1/1000 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: <u>15140022</u> ). Promotes cleavage of GSDMB, thereby inhibiting pyroptosis (PubMed: <u>36899106</u> ). Promotes blood coagulation (PubMed: <u>20676107</u> ). 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: <u>25211214</u> ,

	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.Hum Mutat. 2013 Jun;34(6):905-14.

#### Images

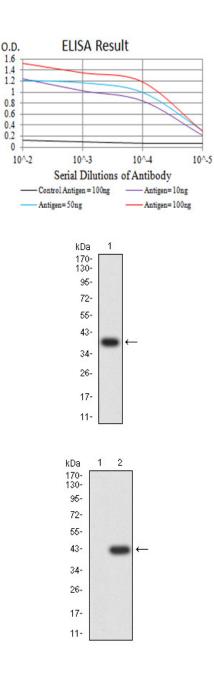


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

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 U937 (1), SPC-A-1 (2), and COS7 (3) cell lysate.

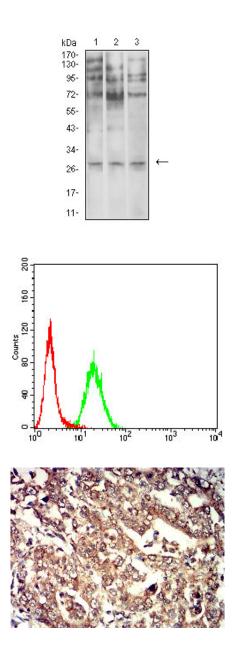


Figure 5:Flow cytometric analysis of Hela cells using ELANE mouse mAb (green) and negative control (red).

Figure 6:Immunohistochemical analysis of paraffin-embedded stomach cancer tissues using ELANE mouse mAb with DAB staining.

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