

SERPINB1 Antibody (internal region)
Peptide-affinity purified goat antibody
Catalog # AF4089a**Specification**

SERPINB1 Antibody (internal region) - Product Information

Application	WB, E
Primary Accession	P30740
Other Accession	NP_109591.1 , 1992
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	42742

SERPINB1 Antibody (internal region) - Additional Information**Gene ID** 1992**Other Names**

Leukocyte elastase inhibitor, LEI, Monocyte/neutrophil elastase inhibitor, EI, M/NEI, Peptidase inhibitor 2, PI-2, Serpin B1, SERPINB1, ELANH2, MNEI, PI2

Dilution

WB~~1:1000

E~~N/A

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

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

SERPINB1 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

SERPINB1 Antibody (internal region) - Protein Information**Name** SERPINB1**Synonyms** ELANH2, MNEI, PI2**Function**

Neutrophil serine protease inhibitor that plays an essential role in the regulation of the innate

immune response, inflammation and cellular homeostasis (PubMed:30692621). Acts primarily to protect the cell from proteases released in the cytoplasm during stress or infection. These proteases are important in killing microbes but when released from granules, these potent enzymes also destroy host proteins and contribute to mortality. Regulates the activity of the neutrophil proteases elastase, cathepsin G, proteinase-3, chymase, chymotrypsin, and kallikrein-3 (PubMed:11747453, PubMed:30692621). Also acts as a potent intracellular inhibitor of GZMH by directly blocking its proteolytic activity (PubMed:23269243). During inflammation, limits the activity of inflammatory caspases CASP1, CASP4 and CASP5 by suppressing their caspase-recruitment domain (CARD) oligomerization and enzymatic activation (PubMed:30692621). When secreted, promotes the proliferation of beta-cells via its protease inhibitory function (PubMed:26701651).

Cellular Location

Secreted. Cytoplasm. Cytolytic granule. Early endosome

Tissue Location

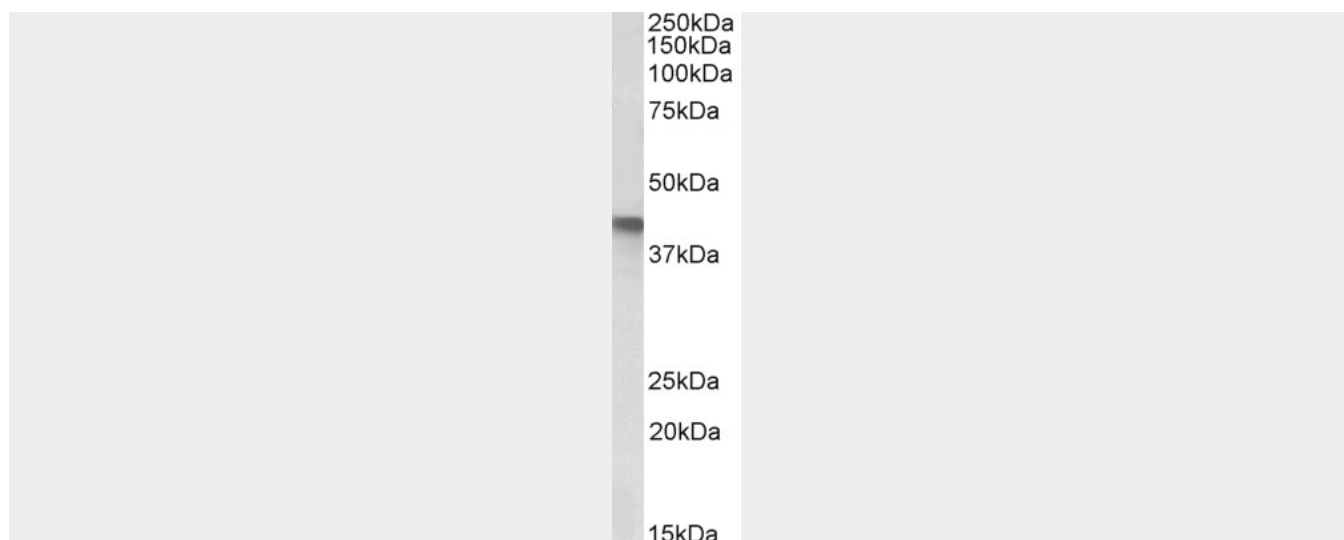
In human bone marrow, present in all CD45+ populations. Expression levels are highest in the neutrophil lineage, intermediate in monocytic, and lowest in lymphocytic lineage. Within the neutrophil lineage, expression is highest in promyelocytes

SERPINB1 Antibody (internal region) - 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](#)

SERPINB1 Antibody (internal region) - Images



AF4089a (1 µg/ml) staining of A549 lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

SERPINB1 Antibody (internal region) - References

SerpinB1 in cystic fibrosis airway fluids: quantity, molecular form and mechanism of elastase inhibition. Cooley J, Sontag MK, Accurso FJ, Remold-O'Donnell E. The European respiratory journal : official journal of the European Society for Clinical Respiratory Physiology 2011 May 37 (5): 1083-90. PMID: 20817705