

**SERPINB1 (aa130-143) Antibody (internal region)**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF4090a****Specification**

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**SERPINB1 (aa130-143) Antibody (internal region) - Product Information**

|                   |                                                    |
|-------------------|----------------------------------------------------|
| Application       | WB, E                                              |
| Primary Accession | <a href="#">P30740</a>                             |
| Other Accession   | <a href="#">NP_109591.1</a> , <a href="#">1992</a> |
| Reactivity        | Human                                              |
| Host              | Goat                                               |
| Clonality         | Polyclonal                                         |
| Concentration     | 0.5 mg/ml                                          |
| Isotype           | IgG                                                |
| Calculated MW     | 42742                                              |

**SERPINB1 (aa130-143) 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 (aa130-143) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

**SERPINB1 (aa130-143) 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:<a href="http://www.uniprot.org/citations/30692621" target="\_blank">30692621</a>). 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:<a href="http://www.uniprot.org/citations/11747453" target="\_blank">11747453</a>, PubMed:<a href="http://www.uniprot.org/citations/30692621" target="\_blank">30692621</a>). Also acts as a potent intracellular inhibitor of GZMH by directly blocking its proteolytic activity (PubMed:<a href="http://www.uniprot.org/citations/23269243" target="\_blank">23269243</a>). During inflammation, limits the activity of inflammatory caspases CASP1, CASP4 and CASP5 by suppressing their caspase-recruitment domain (CARD) oligomerization and enzymatic activation (PubMed:<a href="http://www.uniprot.org/citations/30692621" target="\_blank">30692621</a>). When secreted, promotes the proliferation of beta-cells via its protease inhibitory function (PubMed:<a href="http://www.uniprot.org/citations/26701651" target="\_blank">26701651</a>).

**Cellular Location**

Secreted. Cytoplasm. Cytolytic granule. Early endosome

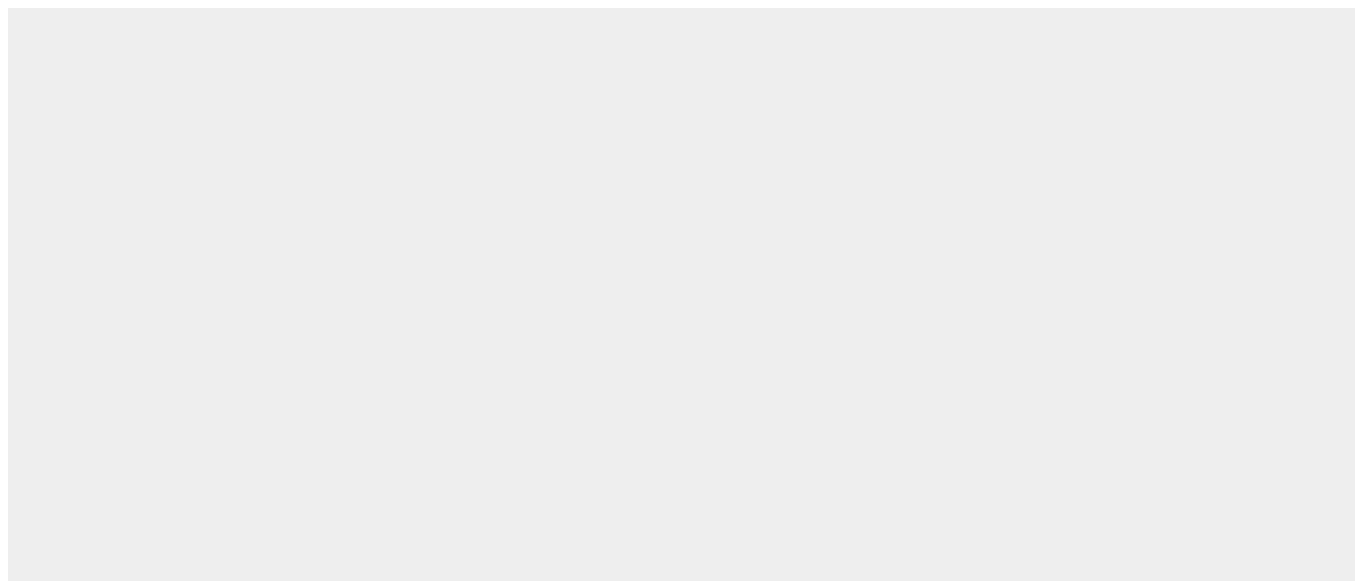
**Tissue Location**

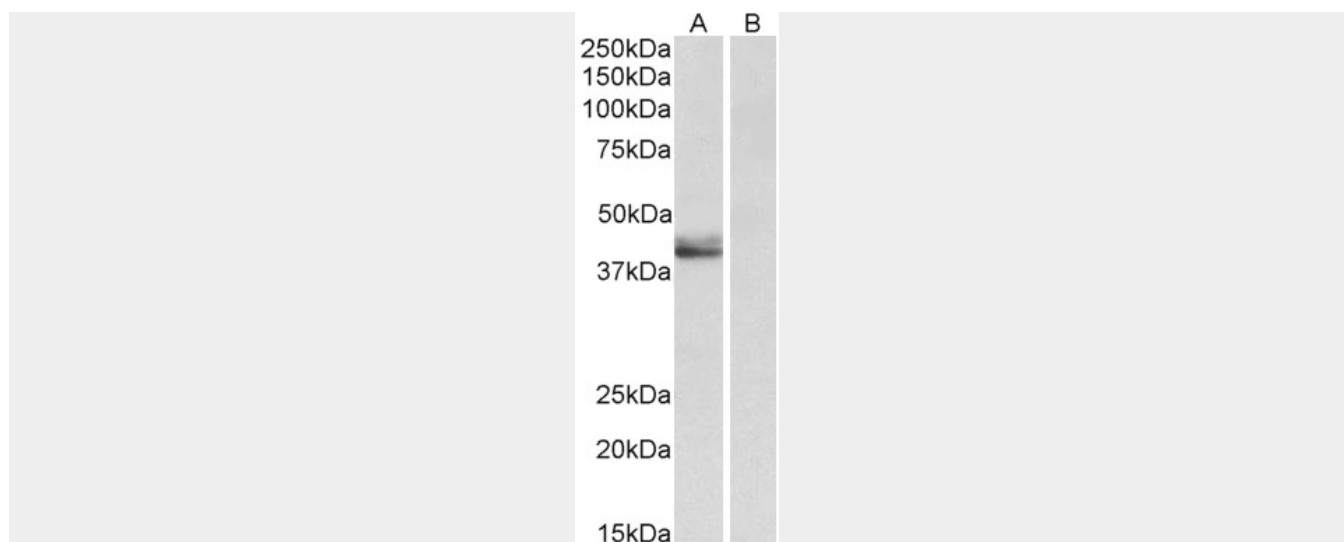
In human bone marrow, present in all CD45+ populations. Expression levels are highest in the neutrophil lineage, intermediate in monocytic, and lowest in lymphocytic lineage. Within the neutrophil lineage, expression is highest in promyelocytes

**SERPINB1 (aa130-143) 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 (aa130-143) Antibody (internal region) - Images**



AF4090a (0.5 µg/ml) staining of Human Placenta lysate (35 µg protein in RIPA buffer) with (B) and without (A) blocking with the immunizing peptide. Primary incubation was 1 hour. Detected by chemiluminescence.

#### **SERPINB1 (aa130-143) 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