

SERPINB1 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP16141c**Specification**

SERPINB1 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [P30740](#)**SERPINB1 Antibody (Center) Blocking Peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SERPINB1 Antibody (Center) Blocking Peptide - 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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/11747453), PubMed: [30692621](http://www.uniprot.org/citations/30692621)). Acts also as a potent intracellular inhibitor of GZMH by directly blocking its proteolytic activity (PubMed: [23269243](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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 (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

SERPINB1 Antibody (Center) Blocking Peptide - Images**SERPINB1 Antibody (Center) Blocking Peptide - Background**

SERPINB1 regulates the activity of the neutrophil proteases elastase, cathepsin G, proteinase-3, chymase, chymotrypsin, and kallikrein-3.

SERPINB1 Antibody (Center) Blocking Peptide - References

Wang, Y., et al. J. Hum. Genet. 55(8):490-494(2010)Yokoyama, K., et al. Nephron Clin Pract 115 (4), C237-C243 (2010) :Ahmed, M., et al. J. Proteome Res. 4(3):931-940(2005)Mungall, A.J., et al. Nature 425(6960):805-811(2003)Gevaert, K., et al. Nat. Biotechnol. 21(5):566-569(2003)