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SERPINB1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP16141c

Specification

SERPINB1 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	P30740
Other Accession	NP_109591.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**42742**
Antigen Region	**168-196**

SERPINB1 Antibody (Center) - 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

Target/Specificity
This SERPINB1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 168-196 amino acids from the Central region of human SERPINB1.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

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

SERPINB1 Antibody (Center) - 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). Acts also 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

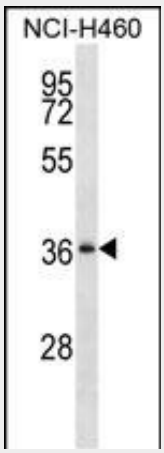
Tissue Location
In human bone marrow, present in all CD45+ populations. Expression levels are highest in the neutrophil lineage, intermediate in monocytic, and lowest in lymphocytic lineage. Within the neutrophil lineage, expression is highest in promyelocytes

SERPINB1 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SERPINB1 Antibody (Center) - Images



SERPINB1 Antibody (Center) (Cat. #AP16141c) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the SERPINB1 antibody detected the SERPINB1 protein (arrow).

SERPINB1 Antibody (Center) - Background

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

SERPINB1 Antibody (Center) - 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)