

SERPINB1 Antibody (aa130-143)

Goat Polyclonal Antibody Catalog # ALS16313

Specification

SERPINB1 Antibody (aa130-143) - Product Information

Application WB, IHC Primary Accession P30740

Reactivity Human, Monkey

Host Goat
Clonality Polyclonal
Calculated MW 43kDa KDa

SERPINB1 Antibody (aa130-143) - 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 Human SERPINB1

Reconstitution & Storage

Store at -20°C. Minimize freezing and thawing.

Precautions

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

SERPINB1 Antibody (aa130-143) - 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

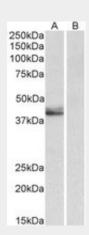
In human bone marrow, present in all CD45+ populations. Expression levels are highest in the neutrophil lineage, intermediate in monocytic, and lowest in lymphocytic lineage. Within the neutrophil lineage, expression is highest in promyelocytes

SERPINB1 Antibody (aa130-143) - Protocols

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

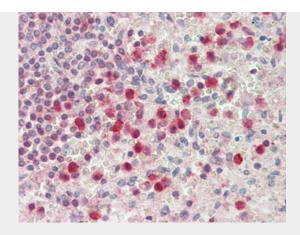
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SERPINB1 Antibody (aa130-143) - Images



SERPINB1 antibody (0.5 ug/ml) staining of Human Placenta lysate (35 ug protein in RIPA buffer)...





Anti-SERPINB1 antibody IHC staining of human spleen, neutrophils.

SERPINB1 Antibody (aa130-143) - Background

Regulates the activity of the neutrophil proteases elastase, cathepsin G, proteinase-3, chymase, chymotrypsin, and kallikrein-3. Also functions as a potent intracellular inhibitor of granzyme H.

SERPINB1 Antibody (aa130-143) - References

Remold-O'Donnell E.,et al.Proc. Natl. Acad. Sci. U.S.A. 89:5635-5639(1992). Zeng W.,et al.Gene 213:179-187(1998). Ota T.,et al.Nat. Genet. 36:40-45(2004). Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases. Totoki Y.,et al.Submitted (APR-2005) to the EMBL/GenBank/DDBJ databases.