

Alpha-1 Antitrypsin Active Protein | SERPINA1 active protein

Recombinant Human Alpha-1 Antitrypsin, Active

CATALOG #
AAA38953

HOST
Rice Grain (Oryza Sativa)

PRODUCT SYNONYMS

Alpha-1 Antitrypsin; Recombinant Human Alpha-1 Antitrypsin; Active; SERPINA1 Human; Active Human Recombinant; Alpha-1-antitrypsin; Alpha-1 protease inhibitor; Alpha-1-antiproteinase; SERPINA1; A1AT; PI; A1A; AAT; PI1; MGC9222; PRO2275; MGC23330; SERPINA1 active protein

PRODUCT SPECIFICATIONS

Host	Rice Grain (Oryza Sativa)
Purity/Purification	Greater than 95% as determined by SDS-PAGE.
Form/Format	SERPINA1 was lyophilized from a concentrated solution containing recombinant Albumin. Sterile Filtered White lyophilized (freeze-dried) powder.
Sequence Length	418
Solubility	It is recommended to reconstitute the lyophilized SERPINA1 in sterile 18M-cm H2O not less than 100 ug/ml, which can then be further diluted to other aqueous solutions.
Biological Activity	3~5 mg SERPINA1 will inhibit 1 mg PPE with an activity of 10.8 units per mg protein
Preparation and Storage	Lyophilized SERPINA1 although stable at room temperature for 3 weeks, should be stored desiccated below -18 degree C. Upon reconstitution SERPINA1 should be stored at 4 degree C between 2-7 days and for future use below -18 degree C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

ADDITIONAL INFORMATION

Related Product Information for SERPINA1 active protein	Description: SERPINA1 Human Recombinant produced in rice is a single, non-glycosylated polypeptide chain containing 384 amino acids and having a molecular mass of 43.1 kDa. The SERPINA1 protein is purified by proprietary chromatographic techniques. Introduction: SERPINA1 is secreted and is a serine protease inhibitor which its targets include elastase, plasmin, collagenase, thrombin, leucocytic proteases, trypsin, chymotrypsin, and plasminogen activator. Defects in SERPINA1 gene can cause emphysema or liver disease. Antral SERPINA1 expression is particularly induced by H. pylori infection. Lung and prostate cancers have shown a significant increase in SERPINA1 serum levels compared with healthy controls though breast cancers did not show a significant change. SERPINA1 is an endogenous inhibitor of serine proteases and inhibits the catalytic domain of human recombinant matriptase in vitro. Rise in SERPINA1 occurs as an acute phase response to tissue necrosis and inflammation. Mutations in SERPINA1 and SLC11A1 genes change the balance between elastase produced by leukocytes during phagocytosis.
Product Categories/Family for SERPINA1 active protein	Recombinant & Natural Proteins; Recombinant Proteins; Serpin

NCBI AND UNIPROT INFORMATION

NCBI GI #	50363217
NCBI GeneID	5265
NCBI Accession #	NP_000286.3

NCBI GenBank Nucleotide #	NM_000295.4
UniProt Accession #	P01009; Q0PVP5; Q13672; Q53XB8; Q5U0M1; Q7M4R2; Q86U18; Q86U19; Q96BF9; Q96ES1; A6PX14; B2RDQ8
Molecular Weight	34,755 Da
NCBI Official Full Name	alpha-1-antitrypsin
NCBI Official Synonym Full Names	serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 1
NCBI Official Symbol	SERPINA1
NCBI Official Synonym Symbols	PI; A1A; AAT; PI1; A1AT; PRO2275; alpha1AT
NCBI Protein Information	alpha-1-antitrypsin; alpha-1 protease inhibitor; alpha-1-antiproteinase; alpha-1-antitrypsin null; protease inhibitor 1 (anti-elastase), alpha-1-antitrypsin; serine (or cysteine) proteinase inhibitor, clade A, member 1; serpin A1
UniProt Protein Name	Alpha-1-antitrypsin
UniProt Gene Name	SERPINA1
UniProt Synonym Gene Names	AAT; PI; SPAAT
UniProt Entry Name	A1AT_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/serpina1-active-protein/alpha-1-antitrypsin/38953>