

# Active Recombinant Full Length Human SERPINA1 Protein, C-Flag-tagged

**Cat. No.** SERPINA1-264HFL    **Lot. No.** (See product label)

## SPECIFICATION

<b>Product Overview</b>	Recombinant Full Length Human SERPINA1 Protein, fused to Flag-tag at C-terminus, was expressed in Mammalian cells.
<b>Species</b>	Human
<b>Source</b>	Mammalian Cells
<b>Description</b>	The protein encoded by this gene is a serine protease inhibitor belonging to the serpin superfamily whose targets include elastase, plasmin, thrombin, trypsin, chymotrypsin, and plasminogen activator. This protein is produced in the liver, the bone marrow, by lymphocytic and monocytic cells in lymphoid tissue, and by the Paneth cells of the gut. Defects in this gene are associated with chronic obstructive pulmonary disease, emphysema, and chronic liver disease. Several transcript variants encoding the same protein have been found for this gene.
<b>Form</b>	25 mM Tris HCl, pH 7.3, 100 mM glycine, 10% glycerol.
<b>Bio-activity</b>	In vivo treatment
<b>Molecular Mass</b>	44.3 kDa
<b>AA Sequence</b>	MPSSVSWGILLLAGLCCLVPVSLAEDPQGDAAQKTDTSHHQDHPNFKITPNLAEF AFSLYRQLAHQSN STNIFFSPVSIATAFAMLSLGTKADTHDEILEGLNFNLTPEAQI HEGFQELLRTL NQPDSQLQLTTGN GLFLSEGLKLVDFLEDVKKLYHSEAFTVNFG

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

DTEEAKKQINDYVEKGTQGKIVDLVKELDRDTVFALVN YIFFKGGKWERPFEVKDTEE  
 EDFHVDQVTTVKVPMMLKRLGMFNIQHCKKLSSWVLLMKYLGNATAIFFLPD EGKLG  
 HLENELTHDIITKFLNEDRRSASLHLPKLSITGTDLKSVLGQLGITKVFNSGADLSG  
 VTEEAP LKLSKAVHKAVLTIDEKGTEAAGAMFLEAIPMSIPPEVKFNKPFVFLMIDQN  
 TKSPFMGKVVNPTQKTRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Purity** > 80% as determined by SDS-PAGE and Coomassie blue staining.

**Stability** Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

**Storage** Store at -80 centigrade.

**Concentration** >50 ug/mL as determined by microplate BCA method.

**Preparation** Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.

**Protein Families** Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein

**Protein Pathways** Complement and coagulation cascades

**Full Length** Full L.

## GENE INFORMATION

**Gene Name** SERPINA1 serpin family A member 1 [ Homo sapiens (human) ]

**Official Symbol** SERPINA1

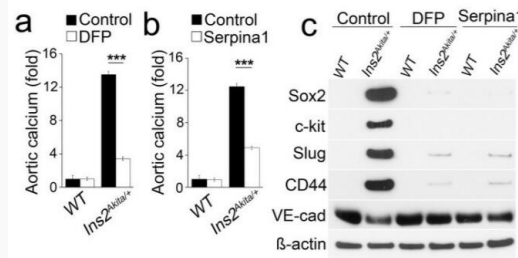
**Synonyms** PI; A1A; AAT; PI1; A1AT; nNIF; PRO2275; alpha1AT

 Tel: 1-631-559-9269 1-516-512-3133

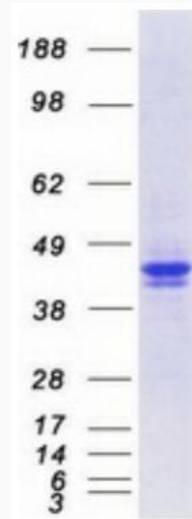
 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Gene ID</b>	5265
<b>mRNA Refseq</b>	NM_000295.5
<b>Protein Refseq</b>	NP_000286.3
<b>MIM</b>	107400
<b>UniProt ID</b>	P01009



Total calcium level of aortas from wild-type (WT) or Ins2Akita/+ mice after treatment of (a) diisopropylfluorophosphate (DFP) or (b) serpin1. \*\*\* p 0.001. (c) Expression of stem-cell markers in isolated aortic endothelial cells of wild-type or Ins2Akita/+ mice after treatment with diisopropylfluorophosphate (DFP) or serpin1, as determined by immunoblotting.



Coomassie blue staining of purified SERPINA1 protein.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA