



# Recombinant Rat Alpha-1-antiproteinase (Serpina1)

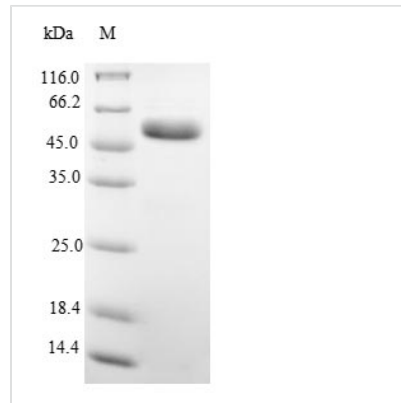
<b>Product Code</b>	CSB-EP021053RA
<b>Relevance</b>	Inhibitor of serine proteases. Its primary target is elastase, but it also has a moderate affinity for plasmin and thrombin. Irreversibly inhibits trypsin, chymotrypsin and plasminogen activator. The aberrant form inhibits insulin-induced NO synthesis in platelets, decreases coagulation time and has proteolytic activity against insulin and plasmin. Short peptide from AAT: reversible chymotrypsin inhibitor. It also inhibits elastase, but not trypsin. Its major physiological function is the protection of the lower respiratory tract against proteolytic destruction by human leukocyte elastase (HLE).
<b>Abbreviation</b>	Recombinant Rat Serpina1 protein
<b>Storage</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	P17475
<b>Alias</b>	Alpha-1 protease inhibitor Alpha-1-antiproteinase; Serpin A1
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Rattus norvegicus (Rat)
<b>Purity</b>	≥ 90% as determined by SDS-PAGE.
<b>Sequence</b>	EDAQETDTSQQDQSPTYRKISSNLADFAFSLYRELVHQSNTSNIFFSPMSITTA FAMLSLGSKGDTRKQILEGLEFNLTQIPEADIIHKAFHLLQLNRPDSELQLNT GNGLFVNKNLKLVEKFLEEVKNNYHSEAFSVNFADSEEAKKVINDYVEKGTQG KIVDLMKQLDEDTV FALVNYIFFK GKWKRPFNPEHTRDADFHV D KSTTVKVPM MNRLGMFDMHYCSTLSSWVLMMDYLG NATAIFLLPDDGKMQHLEQTLTKDLI SRFLLNRQTRSAILYFPKLSISGTYNLKTLSSSLGITRVFNNDADLSGITEDAPLK LSQAVHKAVLTLDERGTEAAGATVVEAVPMSLPPQVKFDHPPFIFMIVESETQSP LFVGKVIDPTR
<b>Research Area</b>	Immunology
<b>Source</b>	E.coli
<b>Target Names</b>	Serpina1
<b>Protein Names</b>	Recommended name: Alpha-1-antiproteinase Alternative name(s): Alpha-1-antitrypsin Alpha-1-proteinase inhibitor Serpin A1
<b>Expression Region</b>	25-411aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	N-terminal 6xHis-SUMO-tagged



**Mol. Weight** 59.7kDa

**Protein Length** Full Length of Mature Protein

**Image**



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

**Shelf Life**

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