



Recombinant Rat Alpha-1-antiproteinase (Serpina1)

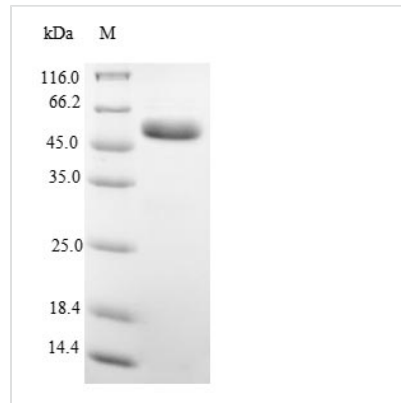
Product Code	CSB-EP021053RA
Relevance	Inhibitor of serine proteases. Its primary target is elastase, but it also has a moderate affinity for plasmin and thrombin. Irreversibly inhibits trypsin, chymotrypsin and plasminogen activator. The aberrant form inhibits insulin-induced NO synthesis in platelets, 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).
Abbreviation	Recombinant Rat Serpina1 protein
Storage	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.
Uniprot No.	P17475
Alias	Alpha-1 protease inhibitor Alpha-1-antiproteinase; Serpin A1
Product Type	Recombinant Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	EDAQETDTSQQDQSPTYRKISSNLADFAFSLYREL VHQSNTSNIFFSPMSITTA FAMLSLGSKGDTRKQILEGLEFNLTQIPEADIIHKAFFHLLQTLNRPDSELQLNT GNGLFVNKNLKLVEKFLEEVKNNYHSEAFSVNFADSEEAKKVINDYVEKGTQG KIVDLMKQLDEDTV FALVNYIFFKGKWKRPFNPEHTRDADFHV D KSTTVKVPM MNR LGMFDMHYCSTLSSWVLMMDYLG NATAI FLLPDDGKMQHLEQTLTKDLI SRFLNLRQTRSAILYFPKLSISGTYNLKTLSSSLGITRVFNNDADLSGITEDAPLK LSQAVHKAVLTLDERGTEAAGATVVEAVPMSLPPQVKFDHPFIFMIVESETQSP LFVGKVIDPTR
Research Area	Immunology
Source	E.coli
Target Names	Serpina1
Protein Names	Recommended name: Alpha-1-antiproteinase Alternative name(s): Alpha-1-antitrypsin Alpha-1-proteinase inhibitor Serpin A1
Expression Region	25-411aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	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 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.