

Recombinant Rat A1AT Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52292

Size: 10ug, 100ug

Protein Name: Alpha-1-antiproteinase (Alpha-1-antitrypsin) (Alpha-1-proteinase inhibitor) (Serpina1)

Synonym: Serpina1

UniProt ID: P17475

UniProt Link: www.uniprot.org/uniprotkb/P17475/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 411 AA

Molecular Weight: 46 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAPSISRGLLLLLAALCCLAPSFLAEDAQETDTSQQDQSPTYRKISSNLADFAFSLYRELVHQSNTSNI
FFSPMSITTAFAMLSLGSKGDTQKQILEGLEFNLTQIPEADIIHKAFFHLLQTLNRPDSELQLNTGNGLF
VNKNLKLVEKFLEEVKNYYHSEAFSVNFADSEEAKKVINDYVEKGTQGGKIVDLMKQLDEDTVFAVLN
YIFFKGKWKRPFNPEHTRDADFHVDKSTTVKVPMMNRLGMFDMHYCSTLSSWVLMMDYLGNATAI
FLLPDDGKMQLHLEQTLTKDLISRFLNRQTRSAILYFPKLSISGTYNLKTLLSSLGITRVFNNDADLSGI
TEDAPLKLSQAVHKAVLTLDERGTEAAGATVVEAVPMSLPPQVKFDHPFIFMIVESETQSPLFVGKVI
DPTR

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Alpha-1-antiproteinase (Alpha-1-antitrypsin) (Alpha-1-proteinase inhibitor) (Serpine A1) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Inhibitor of serine proteases. The primary target is elastase, but also has a moderate affinity for plasmin and thrombin.

Subcellular Localization: Secreted.

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.