

Recombinant Human Alpha-1-Antitrypsin (A1AT)

ORDERING INFORMATION

Catalog Number	Size
13701P-5	5ug
13701P-25	25ug
13701P-1000	1000ug

Formulation: Sterile-filtered colorless solution contains 20mM Tris-HCl, pH 7.5, 1mM DTT, 10% glycerol, and 2mM EDTA. Purified by proprietary chromatographic techniques.

BACKGROUND

Alpha-1-antitrypsin (A1AT) is a serine protease inhibitor that inhibits the catalytic domain of elastase, plasmin, collagenase, thrombin, leucocytic proteases, trypsin, chymotrypsin, and plasminogen activator. Defects in the A1AT gene can lead to emphysema or liver disease. Increased levels of serum A1AT are found in cases of lung and prostate cancers and as an acute phase response to tissue necrosis and inflammation.

DESCRIPTION

Recombinant Human A1AT produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 393 amino acids (aa 25-418) with a molecular weight of 44.4kDa.

SPECIFICATION SUMMARY

Source: *Escherichia coli*

Purity: Greater than 90% as determined by SDS-PAGE.

Accession number: P01009

Amino Acid Sequence:

MEDPQGDAAQ KTDTSHHQD HPTFNKITPN
LAFAFSLYR QLAHQSNSTN IFFSPVSIAT
AFAMLSLGTK ADTHDEILEG LNFNLTEIPE
AQIHEGFQEL LRTLNQPSQ LQLTTGNGLF
LSEGLKLVDK FLEDVKKLYH SEAFVNFVGD
TEEAKKQIND YVEKGTQGKI VDLVKELDRD
TVFALVNYIF FKGKWERPFE VKDTEEEEDFH
VDQVTTVKVP MMKRLGMFNI QHCKKLSSWV
LLMKYLG NAT AIFFLPDEGK LQHLENELTH
DIITKFLNE DRRSASLHLP KLSITGTYDL
KSVLQQLGIT KVFSNGADLS GVTEEAPLKL
SKAVHKAVLT IDEKGTEAAG AMFLEAIPMS
IPPEVKFNKP FVFLMIDQNT KSPLFMGKVV
NPTQK.

STORAGE AND STABILITY

Although stable at 4°C for 4 weeks, product is best stored at or below -20°C. For long-term storage, addition of a carrier protein (such as 0.1% HSA or BSA) is recommended.

For in vitro investigational use only. Not for use in therapeutic or diagnostic procedures.