

# Recombinant human Serpin C1/Antithrombin-III protein

Catalog Number: ATGP2571

## PRODUCT INFORMATION

---

### Expression system

E.coli

### Domain

33-464aa

### UniProt No.

P01008

### NCBI Accession No.

NP\_000479

### Alternative Names

Antithrombin-III precursor, AT3, AT3D, ATIII, THPH7

## PRODUCT SPECIFICATION

---

### Molecular Weight

51.4 kDa (455aa)

### Concentration

0.5mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.4M urea, 10% glycerol

### Purity

> 85% by SDS-PAGE

### Tag

His-Tag

### Application

SDS-PAGE, Denatured

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

---

### Description

Antithrombin-III precursor, also known as SERPINC1, is a plasma protease inhibitor and a member of the serpin superfamily. This protein inhibits thrombin as well as other activated serine proteases of the coagulation system, and it regulates the blood coagulation cascade. The inhibitory activity of SERPINC1 is amplified in the presence of heparin. SERPINC1 inhibits Thrombin and Factors IXa, Xa and XIa. Defects in the gene SERPINC1, which encodes for ATIII, can cause ATIII deficiency, an autosomal dominant disease which is a risk factor for hereditary thrombophilia. Recombinant human SERPINC1 protein, fused to His-tag at N-terminus, was expressed in E. coli.

# Recombinant human Serpin C1/Antithrombin-III protein

Catalog Number: ATGP2571

## Amino acid Sequence

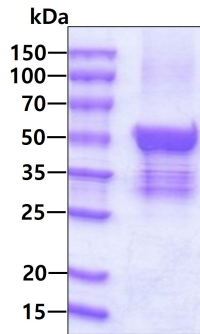
<MGSSHHHHHH SSGLVPRGSH MGS>HGSPVDI CTAKPRDIPM NPMCIYRSPE KKATEDEGSE QKIPEATNRR  
VWELSKANSR FATTFYQHLA DSKNDNDNIF LSPLSISTAF AMTKLGACND TLQQLMEVFK FDTISEKTSQ QIHFFFAKLN  
CRLYRKANKS SKLVSANRLF GDKSLTFNET YQDISELVYG AKLQPLDFKE NAEQSRAAIN KWVSNKTEGR ITDVIPSEAI  
NELTVLVLVN TIYFKGLWKS KFSPENTRKE LFYKADGESC SASMMYQEGK FRYRRVAEGT QVLELPFKGD DITMVLILPK  
PEKSLAKVEK ELTPEVLQEW LDELEEMMLV VHMPPRFRIED GFSLKEQLQD MGLVDLFSPE KSKLPGIVAE GRDDLYVSDA  
FHKAFLEVNE EGSEAAASTA VVIAGRSLNP NRVTFKANRP FLVFIREVPL NTIIFMGRVA NPCVK

## General References

Yeung P K., et al. (2000) IDrugs. 37: 669-673.  
Okajima K., et al. (1995) Am J Hematol. 48: 12-18.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.