

# Product information



## SERPINC1, 33-464aa

Human, His-tagged, Recombinant, *E.coli*

Cat. No. IBATGP2571

**Full name:** Antithrombin-III precursor

**NCBI Accession No.:** NP\_000479

**Synonyms:** AT3, AT3D, ATIII, THPH7

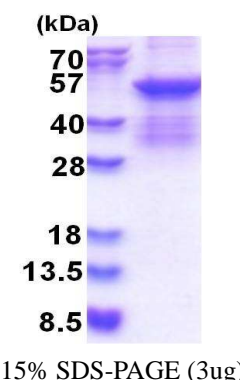
**Description:** Antithrombin-III precursor, also known as SERPINC1, is a plasma protease inhibitor and a member of the serpin superfamily. This protein inhibits thrombin as well as other activated serine proteases of the coagulation system, and it regulates the blood coagulation cascade. The inhibitory 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*.

**Form:** Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.4M Urea, 10% glycerol

**Molecular Weight:** 51.4kDa (455aa)

**Purity:** > 85% by SDS - PAGE

**Concentration:** 0.5 mg/ml (determined by Bradford assay)



### Sequences of amino acids:

MGSSHHHHH SSGLVPRGSH MGSHGSPVDI CTAKPRDIPM NPMCIYRSPE KKATEDEGSE QKIPEATNRR VWELSKANSR FATTFYQHLLA  
DSKNDNDNIF LSPLSISTAF AMTKLGACND TLQQLMEVFK FDTISEKTSQ QIHFFFAKLN CRLYRKANKS SKLVSANRLF GDKSLTFNET  
YQDISELVYG AKLQPLDFKE NAEQSRAAIN KWVSNKTEGR ITDVIPSEAI NELTVLVLVN TIYFKGLWKS KFSPENTRKE LFYKADGESC  
SASMMYQEGK FRYRRAEAGT QVLELPPFKGD DITMVLILPK PEKSLAKVEK ELTPEVLQEW LDELEEMMLV VHMPFRFIED GFSLKEQLQD  
MGLVDFLFSPE 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.

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C.

Avoid repeated freezing and thawing cycles.

**For research use only. This product is not intended or approved for human, diagnostics or veterinary use.**



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