

Recombinant Human SERPINC1, His-tagged

Cat. No. SERPINC1-5075H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human SERPINC1 protein, fused to His-tag at N-terminus, was expressed in E.coli.
Species	Human
Source	E.coli
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.
Form	Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.4M Urea, 10% glycerol
Molecular Mass	51.4kDa (455aa)
AA Sequence	MGSSHHHHHH SSGLVPRGSH MGS HGSPVDI CTAKPRDIPM NPMCIYRSPE KKATEDEGSE QKIPEATNRR VWELSKANSR FATTFYQH LA DSKNDNDNIF LSPLSISTAF AMTKLGACND TLQQLMEVFK FDTISEKTSD QIHFFFAKLN CRLYRKANKS SKLVSANRLF GDKSLTFNET YQDISELVYG AKLQPLDFKE NAEQSRAAIN KWVSNKTEGR ITDVIPSEAI NELTVLVLVN TIYFKGLWKS KFSPENTRKE LFYKADGES C SASMMYQEGK FRYRRVAEGT QVLELPFKGD

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DITMVLILPK PEKSLAKVEK ELTPEVLQEW LDELEEMMLV VHMPRFRIED
 GFSLKEQLQD MGLVDLFSPE KSKLPGIVAE GRDDLIVSDA FHKAFLEVNE
 EGSEAAASTA VVIAGRSLNP NRVTFKANRP FLVFIREVPL NTIIFMGRVA NPCVK

Purity >85% by SDS - PAGE

Applications SDS-PAGE

Storage Can be stored at +4centigrade short term (1-2 weeks). For long term storage, aliquot and store at -20centigrade or -70centigrade. Avoid repeated freezing and thawing cycles.

Concentration 0.5 mg/ml (determined by Bradford assay)

GENE INFORMATION

Gene Name [SERPINC1 serpin peptidase inhibitor, clade C \(antithrombin\), member 1 \[Homo sapiens \]](#)

Official Symbol SERPINC1

Synonyms SERPINC1; serpin peptidase inhibitor, clade C (antithrombin), member 1; AT3, serine (or cysteine) proteinase inhibitor, clade C (antithrombin), member 1; antithrombin-III; antithrombin (aa 375 432); antithrombin III; ATIII; coding sequence signal peptide antithrombin part 1; MGC22579; signal peptide antithrombin part 1; serpin C1; serine-cysteine proteinase inhibitor clade C member 1; serine (or cysteine) proteinase inhibitor, clade C (antithrombin), member 1; AT3; AT3D; THPH7;

Gene ID [462](#)

mRNA Refseq [NM_000488](#)

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Protein Refseq	NP_000479
MIM	107300
UniProt ID	P01008
Chromosome Location	1q23-q25.1
Pathway	Common Pathway, organism-specific biosystem; Complement and Coagulation Cascades, organism-specific biosystem; Complement and coagulation cascades, organism-specific biosystem; Complement and coagulation cascades, conserved biosystem; Formation of Fibrin Clot (Clotting Cascade), organism-specific biosystem; Glypican 1 network, organism-specific biosystem; Hemostasis, organism-specific biosystem;
Function	heparin binding; peptidase inhibitor activity; protease binding; protein binding; serine-type endopeptidase inhibitor activity; serine-type endopeptidase inhibitor activity; serine-type endopeptidase inhibitor activity;