

AR51391PU-S

Human SERPINC1 / Antithrombin-III (33-464, His-tag) - Purified

Alternate names:

AT3, ATIII, Serpin C1

Quantity:

0.1 mg

Concentration:

0.5 mg/ml (determined by Bradford assay)

Background:

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.

Uniprot ID:

[P01008](#)

NCBI:

[NP_000479](#)

GeneID:

[462](#)

Species:

Human

Source:

E. coli

Format:

State: Liquid purified protein

Purity: >85% by SDS - PAGE

Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 0.4M Urea, 10% glycerol

Description:

Recombinant human SERPINC1 protein, fused to His-tag at N-terminus, was expressed in E.coli.

AA Sequence:

MGSSHHHHH SSGLVPRGSH MGS HGSPVDI CTAKPRDIPM NPMCIYRSPE KKATEDEGSE
QKIPEATNRR VWELSKANSR FATTFYQH LA DSKNDNDNIF LSPLSISTAF AMTKLGACND
TLQQLMEVFK FDTISEKTS D QIHFFFAKLN CRLYRKANKS SKLVSANRLF GDKSLTFNET
YQDISELVYG AKLQPLDFKE NAEQSRAAIN KWVSNKTEGR ITDVIPSEAI NELTVLVLVN
TIYFKGLWKS KFSPENTRKE LFYKADGES C SASMMYQEGK FRYRRVAEGT QVLELPFKGD
DITMVLILPK PEKSLAKVEK ELTPEVLQEW LDELEEMMLV VHMPRFRIED GFSLKEQLQD
MGLVDLFSPE KSKLPGIVAE GRDDLVS DA FHKAFLEVNE EGSEAAASTA VVIAGRSLNP
NRVTFKANRP FLVFIREVPL NTIIFMGRVA NPCVK

Molecular weight: 51.4 kDa (455aa)

Storage:

Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer.
Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings:

Yeung P K., et al. (2000) IDrugs. 37: 669-673.

Okajima K., et al. (1995) Am J Hematol. 48: 12-18.

Pictures:

