

Product datasheet

Recombinant human Antithrombin III/ATIII protein (Active) ab234969

1 Image

Description

Product name	Recombinant human Antithrombin III/ATIII protein (Active)	
Biological activity	Measured by its ability to inhibit Thrombin cleavage of substrate Boc-VPR-AMC. The IC ₅₀ for this effect is less or equal to 1 nM.	
Purity	> 90 % SDS-PAGE. Purified by using conventional chromatography techniques.	
Endotoxin level	< 1.000 Eu/μg	
Expression system	Baculovirus infected insect cells	
Accession	P01008	
Protein length	Full length protein	
Animal free	No	
Nature	Recombinant	
Species	Human	
Sequence	<pre>ADPHGSPVDICTAKPRDIPMNP MCMYRSPEKKATEDEG SEQUIPEATNRR VWELSKANSRFATTFYQHLADSKNDNDNIFLSPLSIST AFAMTKLGACND TLQQLMEVFKFDTISEKTS DQIHFFFAKLNCRLYRKANK SSKLVSANRLF GDKSLTFNETYQDISELVYGAKLQPLDFKENAEQSRAA INKWVSNKTEGR ITDVIPSEAINELTVLVLVNTIYFKGLWKS KFSPENTRKE LFYKADGESC SASMMYQEGKFRYRRVAEGTQVLELPFKGDDITMVLIL PKPEKSLAKVEK ELTPEVLQEWLDELEEMMLVVHMPRFRIEDGFSLKEQ LQDMGLVDLFSPE KSKLPGVAEGRDDLVS DAFHKAFLEVNEEGSEAAA STAVVIAGRSLNP NRVTFKANRPFLVFIREVPLNTIIFMGRVANPCVKHHHH HH</pre>	
Predicted molecular weight	52 kDa	

Amino acids	33 to 464
Tags	His tag C-Terminus
Additional sequence information	This product is the mature full length protein from aa 33 to 464. The signal peptide is not included (NP_000479).

Specifications

Our [Abpromise guarantee](#) covers the use of **ab234969** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies SDS-PAGE
Form	Liquid
Additional notes	Previously labelled as Antithrombin III.

Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. pH: 7.40 Constituents: PBS, 10% Glycerol This product is an active protein and may elicit a biological response in vivo, handle with caution.
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General Info

Function	Most important serine protease inhibitor in plasma that regulates the blood coagulation cascade. AT-III inhibits thrombin as well as factors IXa, Xa and XIa. Its inhibitory activity is greatly enhanced in the presence of heparin.
Tissue specificity	Found in plasma.
Involvement in disease	Defects in SERPINC1 are the cause of antithrombin III deficiency (AT3D) [MIM:613118]. AT3D is an important risk factor for hereditary thrombophilia, a hemostatic disorder characterized by a tendency to recurrent thrombosis. AT3D is classified into 4 types. Type I: characterized by a 50% decrease in antigenic and functional levels. Type II: has defects affecting the thrombin-binding domain. Type III: alteration of the heparin-binding domain. Plasma AT-III antigen levels are normal in type II and III. Type IV: consists of miscellaneous group of unclassifiable mutations.
Sequence similarities	Belongs to the serpin family.
Post-translational modifications	Phosphorylation sites are present in the extracellular medium.
Cellular localization	Secreted > extracellular space.

Images



15% SDS-PAGE analysis of 3 µg ab234969.

MW: 50-70 kDa (SDS-PAGE under reducing conditions).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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