Datasheet for ABIN3093102

SERPINA5 Protein (AA 26-406) (His tag)

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Overview

Quantity:	1 mg
Target:	SERPINA5
Protein Characteristics:	AA 26-406
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SERPINA5 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA, Crystallization (Crys)

Product Details

Sequence:	EMKKRVEDLH VGATVAPSSR RDFTFDLYRA LASAAPSQSI FFSPVSISMS LAMLSLGAGS STKMQILEGL GLNLQKSSEK ELHRGFQQLL QELNQPRDGF QLSLGNALFT DLVVDLQDTF VSAMKTLYLA DTFPTNFRDS AGAMKQINDY VAKQTKGKIV DLLKNLDSNA VVIMVNYIFF KAKWETSFNH KGTQEQDFYV TSETVVRVPM MSREDQYHYL LDRNLSCRVV GVPYQGNATA LFILPSEGKM QQVENGLSEK TLRKWLKMFK KRQLELYLPK FSIEGSYQLE KVLPSLGISN VFTSHADLSG ISNHSNIQVS EMVHKAVVEV DESGTRAAAA TGTIFTFRSA RLNSQRLVFN RPFLMFIVDN NILFLGKVNR P **Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**
Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts. • Human SERPINA5 Protein (raised in E. Coli) purified by multi-step, protein-specific process to ensure crystallization grade.

Product Details

	• State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified. In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization). When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered. The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer. The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.
Purification:	Two step purification of proteins expressed in bacterial culture: 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE. 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Endotoxin has not been removed. Please contact us if you require endotoxin removal.
Grade:	Crystallography grade

Target Details

Target:	SERPINA5
Alternative Name:	SERPINA5 (SERPINA5 Products)

Target Details

Background:	Heparin-dependent serine protease inhibitor acting in body fluids and secretions. Inactivates serine proteases by binding irreversibly to their serine activation site. Involved in the regulation of intravascular and extravascular proteolytic activities. Plays hemostatic roles in the blood plasma. Acts as a procoagulant and proinflammatory factor by inhibiting the anticoagulant activated protein C factor as well as the generation of activated protein C factor by the thrombin/thrombomodulin complex. Acts as an anticoagulant factor by inhibiting blood coagulation factors like prothrombin, factor XI, factor Xa, plasma kallikrein and fibrinolytic enzymes such as tissue- and urinary-type plasminogen activators. In seminal plasma, inactivates several serine proteases implicated in the reproductive system. Inhibits the serpin acrosin, indirectly protects component of the male genital tract from being degraded by excessive released acrosin. Inhibits tissue-and urinary-type plasminogen activator, prostate-specific antigen and kallikrein activities, has a control on the sperm motility and fertilization. Inhibits the activated protein C-catalyzed degradation of SEMG1 and SEMG2, regulates the degradation of semenogelin during the process of transfer of spermatozoa from the male reproductive tract into the female tract. In urine, inhibits urinary-type plasminogen activator and kallikrein activities. Inactivates membrane-anchored serine proteases activities such as MPRSS7 and TMPRSS11E. Inhibits urinary-type plasminogen activator-dependent tumor cell invasion and metastasis. May also play a non-inhibitory role in seminal plasma and urine as a hydrophobic hormone carrier by its binding to retinoic acid. {ECO:0000269|PubMed:10340997, ECO:0000269|PubMed:11722589, ECO:0000269|PubMed:14696115, ECO:0000269|PubMed:15140131, ECO:0000269|PubMed:15328353, ECO:0000269|PubMed:15853774, ECO:0000269|PubMed:1725227, ECO:0000269|PubMed:18467335, ECO:0000269|PubMed:2844223, ECO:0000269|PubMed:3501295, ECO:0000269|PubMed:6323392, ECO:0000269|PubMed:7521127, ECO:0000269|PubMed:7548057, ECO:0000269|PubMed:8536714, ECO:0000269|PubMed:8665956, ECO:0000269|PubMed:9473218, ECO:0000269|PubMed:9510955, ECO:0000269|PubMed:9556620}.
Molecular Weight:	43.8 kDa Including tag.
UniProt:	P05154

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a gurantee though.

Application Details

Comment:	In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)