Datasheet for ABIN3088102

alpha 2 Macroglobulin Protein (AA 24-1474) (His tag)

1 Image

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Overview

Quantity:	1 mg
Target:	alpha 2 Macroglobulin (A2M)
Protein Characteristics:	AA 24-1474
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This alpha 2 Macroglobulin protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA, Crystallization (Crys)

Product Details

Sequence:	SVSGKPQYMV LVPSLLHTET TEKGCVLLSY LNETVTVSAS LESVRGNRSL FTDLEAENDV LHCVAFAVPK SSSNEEVMFL TVQVKGPTQE FKKRTTVMVK NEDSLVFVQT DKSIYKPGQT VKFRVVSMDE NFHPLNELIP LVYIQDPKGN RIAQWQSFQL EGGLKQFSFP LSSEPFQGSY KVVVQKKSGG RTEHPFTVEE FVLPKFEVQV TVPKIITILE EEMNVSVCGL YTYGKPVPGH VTVSICRKYS DASDCHGEDS QAFCEKFSGQ LNSHGCFYQQ VKTKVFQLKR KEYEMKLHTE AQIQEEGTVV ELTGRQSSEI TRTITKLSFV KVDSHFRQGI PFFGQVRLVD GKGVPIPNKV IFIRGNEANY YSNATTDEHG LVQFSINTTN VMGTSLTVRV NYKDRSPCYG YQWVSEEHEE AHHTAYLVFS PSKSFVHLEP MSHELPCGHT QTVQAHYILN GGTLLGLKKL SFYYLIMAKG GIVRTGTHGL LVKQEDMKGH FSISIPVKSD IAPVARLLIY AVLPTGDVIG DSAKYDVENC LANKVDLSFS PSQSLPASHA HLRVTAAPQS VCALRAVDQS VLLMKPDAEL SASSVYNLLP EKDLTGFPGP LNDQDNEDCI NRHNVYINGI TYTPVSSTNE KDMYSFLEDM GLKAFTNSKI RKPKMCPQLQ QYEMHGPEGL RVGFYESDVM GRGHARLVHV EEPHTETVRK YFPETWIWDL

VVVNSAGVAE VGVTVPDTIT EWKAGAFCLS EDAGLGISST ASLRAFQPFF VELTMPYSVI RGEAFTLKAT VLNYLPKCIR VSVQLEASPA FLAVPVEKEQ APHCICANGR QTVSWAVTPK SLGNVNFTVS AEALESQELC GTEVPSVPEH GRKDTVIKPL LVEPEGLEKE TTFNSLLCPS GGEVSEELSL KLPPNVVEES ARASVSVLGD ILGSAMQNTQ NLLQMPYGCG EQNMVLFAPN IYVLDYLNET QQLTPEIKSK AIGYLNTGYQ RQLNYKHYDG SYSTFGERYG RNQGNTWLTA FVLKTFAQAR AYIFIDEAHI TQALIWLSQR QKDNGCFRSS GSLLNNAIKG GVEDEVTLSA YITIALLEIP LTVTHPVVRN ALFCLESAWK TAQEGDHGSH VYTKALLAYA FALAGNQDKR KEVLKSLNEE AVKKDNSVHW ERPQKPKAPV GHFYEPQAPS AEVEMTSYVL LAYLTAQPAP TSEDLTSATN IVKWITKQQN AQGGFSSTQD TVVALHALSK YGAATFTRTG KAAQVTIQSS GTFSSKFQVD NNNRLLLQQV SLPELPGEYS MKVTGEGCVY LQTSLKYNIL PEKEEFPFAL GVQTLPQTCD EPKAHTSFQI SLSVSYTGSR SASNMAIVDV KMVSGFIPLK PTVKMLERSN HVSRTEVSSN HVLIYLDKVS NQTLSLFFTV LQDVPVRDLK PAIVKVYDYY ETDEFAIAEY NAPCSKDLGN A

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 A2M Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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

Product Details

	the Expasy's protparam tool to determine the absorption coefficient of each protein.
Purification:	Two step purification of proteins expressed in baculovirus infected SF9 insect cells: 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:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	alpha 2 Macroglobulin (A2M)
Alternative Name:	A2M (A2M Products)
Background:	Is able to inhibit all four classes of proteinases by a unique 'trapping' mechanism. This protein has a peptide stretch, called the 'bait region' which contains specific cleavage sites for different proteinases. When a proteinase cleaves the bait region, a conformational change is induced in the protein which traps the proteinase. The entrapped enzyme remains active against low molecular weight substrates (activity against high molecular weight substrates is greatly reduced). Following cleavage in the bait region a thioester bond is hydrolyzed and mediates the covalent binding of the protein to the proteinase.
Molecular Weight:	161.8 kDa Including tag.
UniProt:	P01023
Pathways:	Lipid Metabolism

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 guarantee though.
Comment:	In cases in which it is highly likely that the recombinant protein with the default tag will be

Application Details

	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)

Images

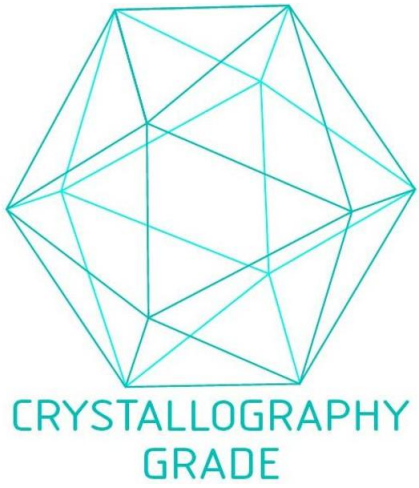

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process