Datasheet for ABIN3096050

TRIM5 Protein (AA 2-493) (His tag)

Go to Product page

1 Image

Overview

Quantity:	1 mg
Target:	TRIM5
Protein Characteristics:	AA 2-493
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TRIM5 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS), Crystallization (Crys)

Product Details

Sequence:	ASGILVNVKE EVTCPICLEL LTQPLSLDCG HSFCQACLTA NHKKSMLDKG ESSCPVCRIS YQPENIRPNR HVANIVEKLR EVKLSPEGQK VDHCARHGEK LLLFCQEDGK VICWLCERSQ EHRGHHTFLT EEVAREYQVK LQAALEMLRQ KQQEAEELEA DIREEKASWK TQIQYDKTNV LADFEQLRDI LDWEESNELQ NLEKEEEDIL KSLTNSETEM VQQTQSLREL ISDLEHRLQG SVMELLQGVD GVIKRTENVT LKKPETFPKN QRRVFRAPDL KGMLEVFREL TDVRRYWVDV TVAPNNISCA VISEDKRQVS SPKPQIIYGA RGTRYQTFVN FNYCTGILGS QSITSGKHYW EVDVSKKTAW ILGVCAGFQP DAMCNIEKNE NYQPKYGYWV IGLEEGVKCS AFQDSSFHTP SVPFIVPLSV IICPDRVGVF LDYEACTVSF FNITNHGFLI YKFSHCSFSQ PVFPYLNPRK CGVPMTLCSP SS **Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**

Product Details

Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts. • Human TRIM5 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 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

 Copyright antibodies-online. All rights reserved.

Target Details

Target:	TRIM5
Alternative Name:	TRIM5 (TRIM5 Products)
Background:	Capsid-specific restriction factor that prevents infection from non-host-adapted retroviruses. Blocks viral replication early in the life cycle, after viral entry but before reverse transcription. In addition to acting as a capsid-specific restriction factor, also acts as a pattern recognition receptor that activates innate immune signaling in response to the retroviral capsid lattice. Binding to the viral capsid triggers its E3 ubiquitin ligase activity, and in concert with the heterodimeric ubiquitin conjugating enzyme complex UBE2V1-UBE2N (also known as UBC13-UEV1A complex) generates 'Lys-63'-linked polyubiquitin chains, which in turn are catalysts in the autophosphorylation of the MAP3K7/TAK1 complex (includes TAK1, TAB2, and TAB3). Activation of the MAP3K7/TAK1 complex by autophosphorylation results in the induction and expression of NF-kappa-B and MAPK-responsive inflammatory genes, thereby leading to an innate immune response in the infected cell. Restricts infection by N-tropic murine leukemia virus (N-MLV), equine infectious anemia virus (EIAV), simian immunodeficiency virus of macaques (SIVmac), feline immunodeficiency virus (FIV), and bovine immunodeficiency virus (BIV) (PubMed:17156811). Plays a role in regulating autophagy through activation of autophagy regulator BECN1 by causing its dissociation from its inhibitors BCL2 and TAB2 (PubMed:25127057). Also plays a role in autophagy by acting as a selective autophagy receptor which recognizes and targets HIV-1 capsid protein p24 for autophagic destruction (PubMed:25127057). {ECO:0000269|PubMed:12878161, ECO:0000269|PubMed:17156811, ECO:0000269|PubMed:18312418, ECO:0000269|PubMed:21035162, ECO:0000269|PubMed:21512573, ECO:0000269|PubMed:21632761, ECO:0000269|PubMed:22291694, ECO:0000269|PubMed:25127057}.
Molecular Weight:	57.2 kDa Including tag.
UniProt:	Q9C035
Pathways:	Activation of Innate immune Response

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.
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

Application Details

	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

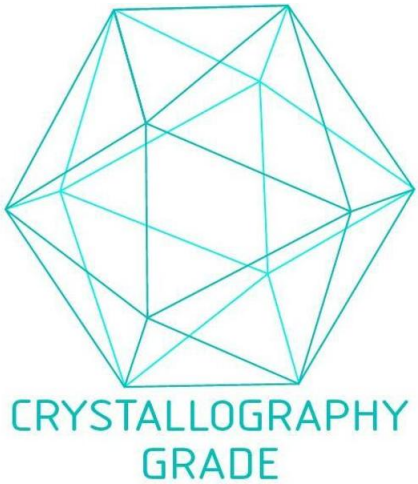

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process