

Datasheet for ABIN3136065
TBC1D5 Protein (AA 1-815) (His tag)



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1 Image

Overview

Quantity:	1 mg
Target:	TBC1D5
Protein Characteristics:	AA 1-815
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TBC1D5 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence: MYKSVSETRH PLQSEEQEVG IDPLFSYSNK TRGDLSQNGR GSNSTLDTEG TFNSYMKWEW
 ELFVNNNYLA TVRQKGINGQ LRSSRFRSIC WKLFLCVLPQ DKSQWISKIK ELRAWYSSIK
 EIHITNPRKA AGQQDLMINN PLSQDEGSLW NKFFQDKELR SMIEQDVKRT FPQMFFQQE
 NVRKILTDVL FCYARENEQL LYKQGMHELL APIIFTLHCD HQAFLHASES AQPSEEMKTL
 LNPEYLEHDA YAMFSQLMET AEPWFSTFEH DGQKGKETLM APIPFARPQD LGPTVAIVTK
 VNQIQDHLLK KHDIELYMH L NRLEIAPQIY GLRWVRLFLG REFPLQDLLV VWDALFADSL
 NLSLVDYVFT AMLLYIRDAL ISSNYQTCLG LLMHYPIIGD IHSLILKALF LRDPKRNPRP
 ATYQFHPNLD YYKARGADLM NKSRTNARGA PLNIHKVSNS LINFGRKLIS PASAPGSMGG
 PVPGNSSSSS FSAAIPTRTS TEAPRHLLQ QQQQQQHQQQ QQQQPQQQQQ QHQQQQQQR
 LMKSESMPVQ LNKGQSSKTI SSSPSIESLP GGREFTGSPP PSATKKDSFF SNIARSRSHS
 KTMGRKESEE ELEAQISFLQ GQLNDLDAMC KYCAKVMDMH LVNIQDVVLQ ENLEKEDQIL
 VSLAGLKQIK DILKGLRFN QSQLEAGENE QITIADDDHYC SSGQDQGSQV PRAAKQASSE

MPGCTGGTTP DDFILVSKED EGHRARGAFS GQAQPLLTLR STSGKSRAPA CSPLLFSDPL
MGPASASASS SNPSSSPDDD SSKESGFTIV SPLDI

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.
- Mouse Tbc1d5 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 receipt 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.

Product Details

Grade: Crystallography grade

Target Details

Target: TBC1D5

Alternative Name: Tbc1d5 ([TBC1D5 Products](#))

Background: May act as a GTPase-activating protein for Rab family protein(s). May act as a GAP for RAB7A. Can displace RAB7A and retromer CSC subcomplex from the endosomal membrane to the cytosol, at least retromer displacement seems to require its catalytic activity. Required for retrograde transport of cargo proteins from endosomes to the trans-Golgi network (TGN), the function seems to require its catalytic activity. Involved in regulation of autophagy. May act as a molecular switch between endosomal and autophagosomal transport and is involved in reprogramming vesicle trafficking upon autophagy induction. Involved in the trafficking of ATG9A upon activation of autophagy. May regulate the recruitment of ATG9A-AP2-containing vesicles to autophagic membranes (By similarity). {ECO:0000250|UniProtKB:Q92609}.

Molecular Weight: 92.8 kDa Including tag.

UniProt: [Q80XQ2](#)

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: Protein has not been tested for activity yet. 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.

Handling

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