

Datasheet for ABIN3136461

TSHZ3 Protein (AA 1-1081) (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	TSHZ3 (ZNF537)
Protein Characteristics:	AA 1-1081
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TSHZ3 protein is labelled with His tag.
Application:	Crystallization (Crys), ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	<p>MPRRKQQAPR RAAAYVSDLE KAAALVEDDV EPEEQAADGE PSAKYMCPPEK ELSKACPSYQ</p> <p>NSPAAEFSSH EMDSESHISE TSDRMADFES SSIKNEEETK EVQVPLEDTT VSDSLEQMKA</p> <p>VYNNFLSNSY WSNLNLNLHQ PSSENNGGSS SSSSSSSSSC GSGSFDWHQS AMAKTLQQVS</p> <p>QNRMLPEPSL FSTVQLYRQS SKLYGSIFTG ASKFRCKDCS AAYDTLVELT VHMNETGHYR</p> <p>DDNHETDNNN PKRWSKPRKR SLLEMEGKED AQKVLKCMYC GHSFESLQDL SVHMIKTKHY</p> <p>QKVPLKEPVT PVAAKIIPAA RKKPSLELEL PSSPDSTGGT PKATLSDASD ALQKNSNPYI</p> <p>TPNNRYGHQN GASYAWHFEA RKSQILKCMC CGSSHDTLQE LTAHMMVTGH FIKVTNSAMK</p> <p>KGKPIMETPV TPTITTTLLDE KVQSVPLAAT TFTSPSNTPA SVSPKLAVEI KKEVDKEKAV</p> <p>PDEKPKEREK PSEEEEEKYDI SSKYHYLTEN DLEESPKGGL DILKSLENTV TSAINKAQNG</p> <p>TPSWG GYPSI HAAYQLPNMM KLSLGSSGKS TPLKPMFGNS EIVSPTKTQT LVSPSSQTS</p> <p>PMPKTNFHAM EELVKKVTEK VAKVEEKMKPE PEGKLSPPKR ATPSPCSSEQ SEPIKMEASS</p> <p>DGSFQSKQENS PSPPRDACKE ASPSAEPVEN GKELVKPLSG GLSGSTAIIT DHPPEQPFVN</p>
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PLSALQSVMN IHLGKAAKPS LPALDPMSML FKMSNSLAEK AAVATPPPLQ AKKAEHLDRY
FYHVNNDQPI DLTKGKSDKG CSLGSGLLSP TSTSPATSSS TVTTAKTSAV VSFMSNSPLR
ENALSDISDM LKNLTESHTS KSSTPSSISE KSDIDGATLE EAEESTPAQK RKGRQSNWNP
QHLLILQAQF AASLRQTSEG KYIMSDLSPQ ERMHISRFTG LSMTTISHWL ANVKYQLRRT
GGTKFLKNLD TGHPVFFCND CASQIRTPST YISHLESHLG FRLRDL SKLS TEQINNQIAQ
TKSPSEKLVT SSPEEDLGTT YQCKLCNRTF ASKHAVKLHL SKTHGKSPED HLLFVSELEK Q

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 Tshz3 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.

Product Details

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:	TSHZ3 (ZNF537)
Alternative Name:	Tshz3 (ZNF537 Products)
Background:	<p>Transcriptional regulator involved in developmental processes. Function in association with APBB1, SET and HDAC factors as a transcriptional repressor, that inhibits the expression of CASP4. TSHZ3-mediated transcription repression involves the recruitment of histone deacetylases HDAC1 and HDAC2. Associates with chromatin in a region surrounding the CASP4 transcriptional start site(s). Regulates the development of neurons involved in both respiratory rhythm and airflow control. Promotes maintenance of nucleus ambiguus (nA) motoneurons, which govern upper airway function, and establishes a respiratory rhythm generator (RRG) activity compatible with survival at birth. Involved in the differentiation of the proximal uretic smooth muscle cells during developmental processes. Involved in the up-regulation of myocardin, that directs the expression of smooth muscle cells in the proximal ureter. {ECO:0000269 PubMed:18776146, ECO:0000269 PubMed:19745106, ECO:0000269 PubMed:20631175}.</p>
Molecular Weight:	119.6 kDa Including tag.
UniProt:	Q8CGV9
Pathways:	Regulation of Muscle Cell Differentiation

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.

Application Details

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