Datasheet for ABIN3096083

TSHZ3 Protein (AA 1-1081) (Strep Tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	TSHZ3 (ZNF537)
Protein Characteristics:	AA 1-1081
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TSHZ3 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	MPRRKQQAPR RAAAYVSEEL KAAALVDEGL DPEEHTADGE PSAKYMCPEK ELARACPSYQ NSPAAEFSCH EMDSESHISE TSDRMADFES GSIKNEEETK EVTVPLEDTT VSDSLEQMKA VYNNFLSNSY WSNLNLNLHQ PSSEKNNGSS SSSSSSSSSC GSGSFDWHQS AMAKTLQQVS QSRMLPEPSL FSTVQLYRQS SKLYGSIFTG ASKFRCKDCS AAYDTLVELT VHMNETGHYR DDNHETDNNN PKRWSKPRKR SLLEMEGKED AQKVLKCMYC GHSFESLQDL SVHMIKTKHY QKVPLKEPVT PVAAKIIPAT RKKASLELEL PSSPDSTGGT PKATISDTND ALQKNSNPYI TPNNRYGHQN GASYAWHFEA RKSQILKCME CGSSHDTLQE LTAHMMVTGH FIKVTNSAMK KGKPIVETPV TPTITTLLDE KVQSVPLAAT TFTSPSNTPA SISPKLNVEV KKEVDKEKAV TDEKPKQKDK PGEEEEKCDI SSKYHYLTEN DLEESPKGGL DILKSLENTV TSAINKAQNG TPSWGGYPSI HAAYQLPNMM KLSLGSSGKS TPLKPMFGNS EIVSPTKNQT LVSPPSSQTS PMPKTNFHAM EELVKKVTEK VAKVEEKMKE PDGKLSPPKR ATPSPCSSEV GEPIKMEASS DGGFRSQENS PSPPRDGCKD GSPLAEPVEN GKELVKPLAS SLSGSTAIIT DHPPEQPFVN

PLSALQSVMN IHLGKAAKPS LPALDPMSML FKMSNSLAEK AAVATPPPLQ SKKADHLDRY FYHVNNDQPI DLTKGKSDKG CSLGSVLLSP TSTAPATSSS TVTTAKTSAV VSFMSNSPLR ENALSDISDM LKNLTESHTS KSSTPSSISE KSDIDGATLE EAEESTPAQK RKGRQSNWNP QHLLILQAQF AASLRQTSEG KYIMSDLSPQ ERMHISRFTG LSMTTISHWL ANVKYQLRRT GGTKFLKNLD TGHPVFFCND CASQIRTPST YISHLESHLG FRLRDLSKLS TEQINSQIAQ TKSPSEKMVT SSPEEDLGTS YQCKLCNRTF ASKHAVKLHL SKTHGKSPED HLLYVSELEK Q

Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified by multi-step, protein-specific process to ensure correct folding and modification.
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.

Product Details

	• The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer. • We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.
Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. 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:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Target Details

Target:	TSHZ3 (ZNF537)
Alternative Name:	TSHZ3 (ZNF537 Products)
Background:	Teashirt homolog 3 (Zinc finger protein 537),FUNCTION: Transcriptional regulator involved in developmental processes. Functions 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) (PubMed:19343227). 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 (By similarity). Involved in the modulation of glutamatergic synaptic transmission and long-term synaptic potentiation (By similarity). {ECO:0000250|UniProtKB:Q8CGV9, ECO:0000269|PubMed:19343227}.
Molecular Weight:	118.6 kDa
UniProt:	Q63HK5

Target Details

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:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications. During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)