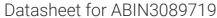
antibodies .- online.com





ATOH8 Protein (AA 1-321) (Strep Tag)



Image



Overview

Quantity:	1 mg
Target:	ATOH8
Protein Characteristics:	AA 1-321
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ATOH8 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:

MKHIPVLEDG PWKTVCVKEL NGLKKLKRKG KEPARRANGY KTFRLDLEAP EPRAVATNGL RDRTHRLQPV PVPVPVPVPV APAVPPRGGT DTAGERGGSR APEVSDARKR CFALGAVGPG LPTPPPPPPP APQSQAPGGP EAQPFREPGL RPRILLCAPP ARPAPSAPPA PPAPPESTVR PAPPTRPGES SYSSISHVIY NNHQDSSASP RKRPGEATAA SSEIKALQQT RRLLANARER TRVHTISAAF EALRKQVPCY SYGQKLSKLA ILRIACNYIL SLARLADLDY SADHSNLSFS ECVORCTRTL OAEGRAKKRK E

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 posttranslational 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.
- 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.
- 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.

Product Details Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg) Endotoxin Level: Grade: Crystallography grade Target Details Target: ATOH8 Alternative Name: ATOH8 (ATOH8 Products) Background: Transcription factor ATOH8 (Class A basic helix-loop-helix protein 21) (bHLHa21) (Helix-loophelix protein hATH-6) (hATH6) (Protein atonal homolog 8),FUNCTION: Transcription factor that binds a palindromic (canonical) core consensus DNA sequence 5'-CANNTG-3' known as an Ebox element, possibly as a heterodimer with other bHLH proteins (PubMed:24236640). Regulates endothelial cell proliferation, migration and tube-like structures formation (PubMed:24463812). Modulates endothelial cell differentiation through NOS3 (PubMed:24463812). May be implicated in specification and differentiation of neuronal cell lineages in the brain (By similarity). May participate in kidney development and may be involved in podocyte differentiation (By similarity). During early embryonic development is involved in tissue-specific differentiation processes that are dependent on class II bHLH factors and namely modulates the differentiation program initiated by the pro-endocrine factor NEUROG3 (By similarity). During myogenesis, may play a role during the transition of myoblasts from the proliferative phase to the differentiation phase (By similarity). Positively regulates HAMP transcription in two ways, firstly by acting directly on the HAMP promoter via E-boxes binding and indirectly through increased phosphorylation of SMAD protein complex (PubMed:24236640). Repress NEUROG3-dependent gene activation in a gene-specific manner through at least two mechanisms, requires only either the sequestering of a general partner such as TCF3 through heterodimerization, either also requires binding of the bHLH domain to DNA via a basic motif (By similarity). (ECO:0000250|UniProtKB:Q99NA2, ECO:0000269|PubMed:24236640, ECO:0000269|PubMed:24463812}. Molecular Weight: 34.6 kDa UniProt: Q96SQ7 Pathways: Regulation of Muscle Cell Differentiation **Application Details** In addition to the applications listed above we expect the protein to work for functional studies **Application Notes:**

as well. As the protein has not been tested for functional studies yet we cannot offer a

Application Details

Application betails		
	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)	



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