

# Datasheet for ABIN7564915 **ATOH8 Protein (AA 1-322) (His tag)**



### Overview

Quantity:	1 mg
Target:	ATOH8
Protein Characteristics:	AA 1-322
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ATOH8 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details	
Purpose:	Custom-made recombinat Atoh8 Protein expressed in mammalien cells.
Sequence:	MKHIPVLEDG PWKTVCVKEL NGLKKLKRKG KEPVRRANGY KTFRLDLEAP ELGATVSTTA
	ATNGLRDRTQ PFPIATPVPA SVAPAVPPGG GTDTAREFRG IRAPEVSDAR KRGFALGTVG
	PGLPTPPPPP ASQSLAPGDP EAHSFREQAL RPRILLCAPP ARPTQSAPLA PPAAPQESPV
	RPAPPTRPGE SSYSSISHVI YNNHPDSSAS PRKRPGEATA ASTEIKALQQ TRRLLANARE
	RTRVHTISAA FEALRKQVPC YSYGQKLSKL AILRIACNYI LSLARLADLD YSADHSNLSF
	SECVQRCTRT LQAEGRAKKR KE Sequence without tag. The proposed Purification-Tag is
	based on experiences 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 to order protein - from design to production - by highly experienced protein experts.

- · Protein expressed in mammalien cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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 try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

## **Target Details**

Target:	ATOH8

#### Alternative Name:

#### Atoh8 (ATOH8 Products)

#### Background:

Transcription factor Atoh8 (Helix-loop-helix protein mATH-6) (mATH6) (Okadin) (Protein atonal homolog 8),FUNCTION: Transcription factor that binds a palindromic (canonical) core consensus DNA sequence 5'-CANNTG-3' known as an E-box element, possibly as a heterodimer with other bHLH proteins (By similarity). Regulates endothelial cell proliferation, migration and tube-like structures formation (By similarity). Modulates endothelial cell differentiation through NOS3 (By similarity). May be implicated in specification and differentiation of neuronal cell lineages in the brain (PubMed:11733035). May participate in kidney development and may be involved in podocyte differentiation (PubMed:16937370). 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 (PubMed:18560595). During myogenesis, may play a role during the transition of myoblasts from the proliferative phase to the differentiation phase (PubMed:24186058). 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 (By similarity). 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 (PubMed:23938248).

{ECO:0000250|UniProtKB:Q96SQ7, ECO:0000269|PubMed:11733035, ECO:0000269|PubMed:16937370, ECO:0000269|PubMed:18560595, ECO:0000269|PubMed:23938248}.

Molecular Weight: 34.8 kDa

UniProt: Q99NA2

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.

Restrictions: For Research Use only

# Handling

Format:	Liquid
Buffer:	The buffer composition 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:	12 months