

Datasheet for ABIN7556425 ATOH7 Protein (AA 1-149) (His tag)



Overview

Quantity:	1 mg
Target:	ATOH7
Protein Characteristics:	AA 1-149
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ATOH7 protein is labelled with His tag.

Product Details	
Purpose:	Custom-made recombinant Atoh7 Protein expressed in mammalian cells.
Sequence:	MKSACKPHGP PAGARGAPPC AGAAERAVSC AGPGRLESAA RRRLAANARE RRRMQGLNTA
	FDRLRRVVPQ WGQDKKLSKY ETLQMALSYI IALTRILAEA ERDWVGLRCE QRGRDHPYLP
	FPGARLQVDP EPYGQRLFGF QPEPFPMAS 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.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:
	Made to order protein - from design to production - by highly experienced protein experts.
	 Protein expressed in mammalian 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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

Target Details

Target: ATOH7

Alternative Name: Atoh7 (ATOH7 Products)

Background:

Transcription factor Atoh7 (Atonal bHLH transcription factor 7) (Helix-loop-helix protein mATH-5) (mATH5) (Protein atonal homolog 7), FUNCTION: Transcription factor that binds to DNA at the consensus sequence 5'-CAG[GC]TG-3' (PubMed:33712461). Dimerization with TCF3 isoform E47 may be required in certain situations (By similarity). Binds to gene promoters and enhancer elements, and thereby regulates a transcriptional program of retinal ganglion cell (RGC) determinant genes (PubMed:33712461). Although the exact mechanism is not certain, retinal transcription regulation by ATOH7 has a role in RGC determination and survival, photoreceptor population development, targeting of RGC axons to the optic nerve and development of the retino-hypothalamic tract (PubMed:11493566, PubMed:11156601, PubMed:12451142, PubMed:33712461). Binds to its own promoter and enhancer sequences, suggesting autoregulation of ATOH7 transcription (PubMed:33712461). Required for retinal circadian rhythm photoentrainment (PubMed:12451142, PubMed:26392540). Plays a role in brainstem auditory signaling and binaural processing (PubMed:17977745). {ECO:0000250|UniProtKB:Q8N100, ECO:0000269|PubMed:11156601, ECO:0000269|PubMed:11493566, ECO:0000269|PubMed:12451142, ECO:0000269|PubMed:17977745, ECO:0000269|PubMed:26392540,

ECO:0000269|PubMed:33712461}.

Target Details

Molecular Weight:	16.6 kDa
UniProt:	Q9Z2E5

Application Details

Application Notes:	We expect the protein to work for functional studies. 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