

ATOH7 Blocking Peptide (Center)

Synthetic peptide

Catalog # BP20067c

Specification

ATOH7 Blocking Peptide (Center) - Product Information

Primary Accession

[O8N100](#)

Other Accession

[NP_660161.1](#)**ATOH7 Blocking Peptide (Center) - Additional Information**

Gene ID 220202

Other Names

Protein atonal homolog 7, Class A basic helix-loop-helix protein 13, bHLHa13, Helix-loop-helix protein hATH-5, hATH5, ATOH7, ATH5, BHLHA13

Target/Specificity

The synthetic peptide sequence is selected from aa 100-112 of HUMAN ATOH7

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ATOH7 Blocking Peptide (Center) - Protein InformationName ATOH7 ([HGNC:13907](#))

Synonyms ATH5, BHLHA13

Function

Transcription factor that binds to DNA at the consensus sequence 5'-CAG[GC]TG-3' (PubMed:31696227). Dimerization with TCF3 isoform E47 may be required in certain situations (PubMed:31696227). Binds to gene promoters and enhancer elements, and thereby regulates a transcriptional program of retinal ganglion cell (RGC) determinant genes (By similarity). 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 (By similarity). Binds to its own promoter and enhancer sequences, suggesting autoregulation of ATOH7 transcription (By similarity). Required for retinal circadian rhythm photoentrainment (By similarity). Plays a role in brainstem auditory

signaling and binaural processing (By similarity).

Cellular Location

Nucleus. Perikaryon {ECO:0000250|UniProtKB:Q9Z2E5}. Cell projection, axon {ECO:0000250|UniProtKB:Q9Z2E5}

ATOH7 Blocking Peptide (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

ATOH7 Blocking Peptide (Center) - Images**ATOH7 Blocking Peptide (Center) - Background**

ATOH7 is a member of the family of basic helix-loop-helix (bHLH) proteins with similarity to Drosophila 'atonal,' a proneural bHLH gene that controls photoreceptor development (Brown et al., 2002 [PubMed 11889557]).

ATOH7 Blocking Peptide (Center) - References

Macgregor, S., et al. Hum. Mol. Genet. 19(13):2716-2724(2010)
Ramdas, W.D., et al. PLoS Genet. 6 (6), E1000978 (2010) :
McLellan, A.S., et al. Mech. Dev. 119 SUPPL 1, S285-S291 (2002) :
McLellan, A.S., et al. Gene Expr. Patterns 2 (3-4), 329-335 (2002) :
Brown, N.L., et al. Mamm. Genome 13(2):95-101(2002)