

ATOH7 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20067c**Specification**

ATOH7 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	Q8N100
Other Accession	NP_660161.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	16871
Antigen Region	85-112

ATOH7 Antibody (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

This ATOH7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 85-112 amino acids from the Central region of human ATOH7.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ATOH7 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

ATOH7 Antibody (Center) - Protein Information**Name** 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).

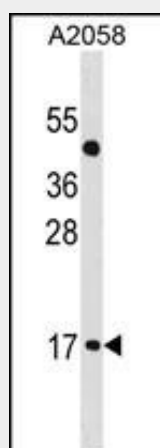
Cellular Location

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

ATOH7 Antibody (Center) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ATOH7 Antibody (Center) - Images

ATOH7 Antibody (Center) (Cat. #AP20067c) western blot analysis in A2058 cell line lysates (35ug/lane). This demonstrates the ATOH7 antibody detected the ATOH7 protein (arrow).

ATOH7 Antibody (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 Antibody (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)