

ATOH7 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP20067c

Product Information

Application	WB, E
Primary Accession	Q8N100
Other Accession	NP_660161.1
Reactivity	Human
Predicted	Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB42355
Calculated MW	16871
Antigen Region	85-112

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.

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}

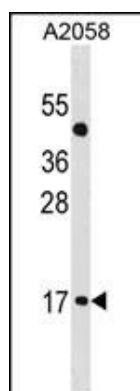
Background

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]).

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)

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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.