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ATOH8 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13675a

Product Information

Application	WB, E
Primary Accession	Q96SQ7
Other Accession	NP_116216.2
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB33477
Calculated MW	34644
Antigen Region	10-39

Additional Information

Gene ID	84913
Other Names	Protein atonal homolog 8, Class A basic helix-loop-helix protein 21, bHLHa21, Helix-loop-helix protein hATH-6, hATH6, ATOH8, ATH6, BHLHA21
Target/Specificity	This ATOH8 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 10-39 amino acids from the N-terminal region of human ATOH8.
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	ATOH8 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ATOH8 (HGNC:24126)
Synonyms	ATH6, BHLHA21
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 (PubMed:24236640). Regulates endothelial cell proliferation, migration and tube-like structures formation (PubMed:24463812). Modulates endothelial cell differentiation through NOS3 (PubMed:24463812). May be implicated in specification and differentiation of neuronal cell lineages in the brain (By similarity). May participate in kidney development and may be involved in podocyte differentiation (By similarity). 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 (By similarity). During myogenesis, may play a role during the transition of myoblasts from the proliferative phase to the differentiation phase (By similarity). 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 (PubMed:24236640). 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 (By similarity).

Cellular Location

Nucleus. Nucleus speckle. Cytoplasm {ECO:0000250|UniProtKB:Q99NA2}

Tissue Location

Expressed in lung, liver, kidney, heart and pancreas. Expressed in endothel of umbilical vessels

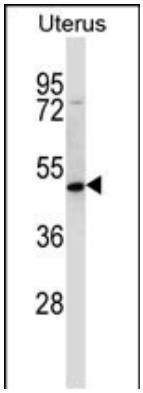
Background

Putative transcription factor. May be implicated in specification and differentiation of neuronal cell lineages in the brain. May participate in kidney development and may be involved in podocyte differentiation (By similarity).

References

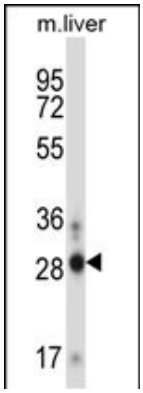
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)

Images



ATOH8 Antibody (N-term) (Cat. #AP13675a) western blot analysis in human normal Uterus tissue lysates (35ug/lane).This demonstrates the ATOH8 antibody detected the ATOH8 protein (arrow).

ATOH8 Antibody (N-term) (Cat. #AP13675a) western blot analysis in mouse liver tissue lysates (35ug/lane).This demonstrates the ATOH8 antibody detected the ATOH8 protein (arrow).



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