10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ATOH8 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13675a

Specification

ATOH8 Antibody (N-term) - Product Information

Application	**WB,E**
Primary Accession	Q96SQ7
Other Accession	NP_116216.2
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**10-39**

ATOH8 Antibody (N-term) - 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.

ATOH8 Antibody (N-term) - 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}

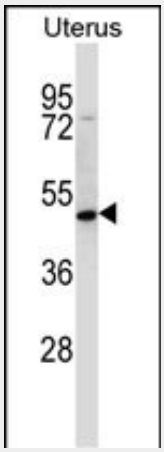
Tissue Location
Expressed in lung, liver, kidney, heart and pancreas. Expressed in endothel of umbilical vessels

ATOH8 Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

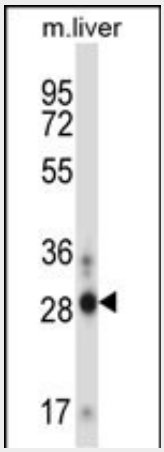
ATOH8 Antibody (N-term) - Images



ATOH8 Antibody (N-term) (Cat. #AP13675a) western blot analysis in human normal Uterus tissue

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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).

ATOH8 Antibody (N-term) - 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).

ATOH8 Antibody (N-term) - 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)