

ATOH8 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP13675a**Specification**

ATOH8 Antibody (N-term) Blocking peptide - Product InformationPrimary Accession [Q96SQ7](#)**ATOH8 Antibody (N-term) Blocking peptide - 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

The synthetic peptide sequence used to generate the antibody AP13675a was selected from the N-term region of ATOH8. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

ATOH8 Antibody (N-term) Blocking peptide - Protein InformationName 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) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

ATOH8 Antibody (N-term) Blocking peptide - Images**ATOH8 Antibody (N-term) Blocking peptide - 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) Blocking peptide - 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)