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Protein atonal homolog 8 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54678

Specification

Protein atonal homolog 8 Polyclonal Antibody - Product Information

Application	**IHC-P, IHC-F, IF, ICC, E**
Primary Accession	Q96SQ7
Reactivity	**Rat, Pig, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**35 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human HATH6/Protein atonal homolog 8**
Epitope Specificity	**231-321/321**
Isotype	**IgG**

Purity
affinity purified by Protein A

Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Nucleus.**
SIMILARITY	**Contains 1 basic helix-loop-helix (bHLH) domain.**
SUBUNIT	**Efficient DNA binding requires dimerization with another bHLH protein**
Important Note	**This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**

Background Descriptions
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.

Protein atonal homolog 8 Polyclonal Antibody - 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 {ECO:0000312|EMBL:AAO85773.1}, hATH6, ATOH8 (HGNC:24126), ATH6, BHLHA21

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

Dilution
IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.

Protein atonal homolog 8 Polyclonal Antibody - 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

Protein atonal homolog 8 Polyclonal Antibody - 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

Protein atonal homolog 8 Polyclonal Antibody - Images