

ASCL1 Antibody(N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19731a

Specification

ASCL1 Antibody(N-term) - Product Information

WB,E Application **Primary Accession** P50553 NP 004307.2 Other Accession Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG **Antigen Region** 63-90

ASCL1 Antibody(N-term) - Additional Information

Gene ID 429

Other Names

Achaete-scute homolog 1, ASH-1, hASH1, Class A basic helix-loop-helix protein 46, bHLHa46, ASCL1, ASH1, BHLHA46, HASH1

Target/Specificity

This ASCL1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 63-90 amino acids from the N-terminal region of human ASCL1.

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

ASCL1 Antibody(N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ASCL1 Antibody(N-term) - Protein Information

Name ASCL1 (HGNC:738)

Function Transcription factor that plays a key role in neuronal differentiation: acts as a pioneer



transcription factor, accessing closed chromatin to allow other factors to bind and activate neural pathways. Directly binds the E box motif (5'-CANNTG-3') on promoters and promotes transcription of neuronal genes. The combination of three transcription factors, ASCL1, POU3F2/BRN2 and MYT1L, is sufficient to reprogram fibroblasts and other somatic cells into induced neuronal (iN) cells in vitro. Plays a role at early stages of development of specific neural lineages in most regions of the CNS, and of several lineages in the PNS. Essential for the generation of olfactory and autonomic neurons. Acts synergistically with FOXN4 to specify the identity of V2b neurons rather than V2a from bipotential p2 progenitors during spinal cord neurogenesis, probably through DLL4-NOTCH signaling activation. Involved in the regulation of neuroendocrine cell development in the glandular stomach (By similarity).

Cellular Location

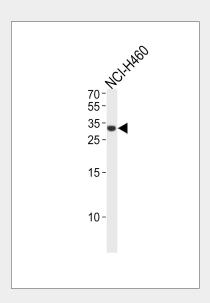
Nucleus {ECO:0000250|UniProtKB:Q02067}.

ASCL1 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
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

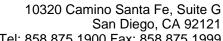
ASCL1 Antibody(N-term) - Images



ASCL1 Antibody (N-term) (Cat. #AP19731a) western blot analysis in NCI-H460 cell line lysates (35ug/lane). This demonstrates the ASCL1 antibody detected the ASCL1 protein (arrow).

ASCL1 Antibody(N-term) - Background

This gene encodes a member of the basic helix-loop-helix (BHLH) family of transcription factors. The protein activates transcription by binding to the E box (5'-CANNTG-3'). Dimerization





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with other BHLH proteins is required for efficient DNA binding. This protein plays a role in the neuronal commitment and differentiation and in the generation of olfactory and autonomic neurons. Mutations in this gene may contribute to the congenital central hypoventilation syndrome (CCHS) phenotype in rare cases.

ASCL1 Antibody(N-term) - References

Phi, J.H., et al. J Neurosurg Pediatr 5(6):608-614(2010) McGaughey, D.M., et al. Genomics 95(6):363-369(2010) Li, F., et al. Zhongguo Fei Ai Za Zhi 13(4):317-321(2010) Deng, H., et al. Biochem. Biophys. Res. Commun. 392(4):548-550(2010) Improgo, M.R., et al. Mol. Cancer Res. 8(2):194-203(2010)