

ASCL1 (Achaete-scute homolog 1) Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP2019b**Specification**

ASCL1 (Achaete-scute homolog 1) Antibody (C-term) Blocking peptide - Product InformationPrimary Accession
Other Accession[P50553](#)
[NP_004307](#)**ASCL1 (Achaete-scute homolog 1) Antibody (C-term) Blocking peptide - 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

The synthetic peptide sequence used to generate the antibody [AP2019b](/product/products/AP2019b) was selected from the C-term region of human Hash1. 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.

ASCL1 (Achaete-scute homolog 1) Antibody (C-term) Blocking peptide - 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 (Achaete-scute homolog 1) Antibody (C-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

ASCL1 (Achaete-scute homolog 1) Antibody (C-term) Blocking peptide - Images**ASCL1 (Achaete-scute homolog 1) Antibody (C-term) Blocking peptide - Background**

ACSL1, alternatively titled Hash1 or Mash1, is a member of the basic helix-loop-helix (BHLH) family of transcription factors. It activates transcription by binding to the E box (5'-CANNTG-3'). Dimerization with other BHLH proteins is required for efficient DNA binding. ACSL1 plays a role in the neuronal commitment and differentiation and in the generation of olfactory and autonomic neurons. The protein is highly expressed in medullary thyroid cancer and small cell lung cancer and may be a useful marker for these cancers. The presence of a CAG repeat in the gene suggests it may also play a role in tumor formation.

ASCL1 (Achaete-scute homolog 1) Antibody (C-term) Blocking peptide - References

Sriuranpong, V., et al., Mol. Cell. Biol. 22(9):3129-3139 (2002). Westerman, B.A., et al., Clin. Cancer Res. 8(4):1082-1086 (2002). Chen, H., et al., Cell Growth Differ. 8(6):677-686 (1997). Borges, M., et al., Nature 386(6627):852-855 (1997). Renault, B., et al., Genomics 30(1):81-83 (1995).