

**ASCL1 (Achaete-scute homolog 1) Blocking Peptide (C-term D220)**  
**Synthetic peptide**  
**Catalog # BP2019d****Specification**

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**ASCL1 (Achaete-scute homolog 1) Blocking Peptide (C-term D220) - Product Information**

Primary Accession [P50553](#)  
Other Accession [Q90259](#), [P19359](#), [Q02067](#), [NP\\_004307](#)

**ASCL1 (Achaete-scute homolog 1) Blocking Peptide (C-term D220) - 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 is selected from aa 220~236 of HUMAN ASCL1

**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) Blocking Peptide (C-term D220) - 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) Blocking Peptide (C-term D220) - Protocols**

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

- [Blocking Peptides](#)

**ASCL1 (Achaete-scute homolog 1) Blocking Peptide (C-term D220) - Images****ASCL1 (Achaete-scute homolog 1) Blocking Peptide (C-term D220) - 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) Blocking Peptide (C-term D220) - 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).