

ASCL1 Blocking Peptide(N-term)
Synthetic peptide
Catalog # BP19731a**Specification**

ASCL1 Blocking Peptide(N-term) - Product Information

Primary Accession [P50553](#)
Other Accession [NP_004307.2](#)

ASCL1 Blocking Peptide(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

The synthetic peptide sequence is selected from aa 78-90 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 Blocking Peptide(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 Blocking Peptide(N-term) - Protocols

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

- [Blocking Peptides](#)

ASCL1 Blocking Peptide(N-term) - Images

ASCL1 Blocking Peptide(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 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 Blocking Peptide(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)