

(Mouse) Shh Blocking Peptide (C-term)
Synthetic peptide
Catalog # BP21097a**Specification****(Mouse) Shh Blocking Peptide (C-term) - Product Information**Primary Accession [Q62226](#)**(Mouse) Shh Blocking Peptide (C-term) - Additional Information****Gene ID** 20423**Other Names**

Sonic hedgehog protein, SHH, HHG-1, Sonic hedgehog protein N-product, Sonic hedgehog protein 19 kDa product, Sonic hedgehog protein C-product, Sonic hedgehog protein 27 kDa product, Shh, Hhg1

Target/Specificity

The synthetic peptide sequence is selected from aa 397-411 of HUMAN Shh

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.

(Mouse) Shh Blocking Peptide (C-term) - Protein Information**Name** Shh {ECO:0000312|MGI:MGI:98297}**Synonyms** Hhg1**Function****(Mouse) Shh Blocking Peptide (C-term) - Background**

Binds to the patched (PTC) receptor, which functions in association with smoothened (SMO), to activate the transcription of target genes. In the absence of SHH, PTC represses the constitutive signaling activity of SMO. Also regulates another target, the gli oncogene. Intercellular signal essential for a variety of patterning events during development: signal produced by the notochord that induces ventral cell fate in the neural tube and somites, and the polarizing signal for patterning of the anterior-posterior axis of the developing limb bud. Displays both floor plate- and motor neuron-inducing activity. The threshold concentration of N-product required for motor neuron induction is 5-fold lower than that required for floor plate induction (By similarity).

(Mouse) Shh Blocking Peptide (C-term) - References

Echelard Y., et al. Cell 75:1417-1430(1993).
McMahon A.P., et al. Submitted (NOV-1997) to the EMBL/GenBank/DDBJ databases.
Chang D.T., et al. Development 120:3339-3353(1994).
Carninci P., et al. Science 309:1559-1563(2005).
Roelink H., et al. Cell 81:445-455(1995).

[Sonic hedgehog protein]: The C-terminal part of the sonic hedgehog protein precursor displays an autoproteolysis and a cholesterol transferase activity (PubMed:8824192, PubMed:7891723). Both activities result in the cleavage of the full-length protein into two parts (ShhN and ShhC) followed by the covalent attachment of a cholesterol moiety to the C-terminal of the newly generated ShhN (PubMed:8824192). Both activities occur in the reticulum endoplasmic (PubMed:21357747). Once cleaved, ShhC is degraded in the endoplasmic reticulum (PubMed:21357747).

Cellular Location

[Sonic hedgehog protein N-product]: Cell membrane; Lipid-anchor. Note=The dual-lipidated sonic hedgehog protein N-product (ShhNp) is firmly tethered to the cell membrane where it forms multimers (PubMed:24522195). Further solubilization and release from the cell surface seem to be achieved through different mechanisms, including the interaction with DISP1 and SCUBE2, movement by lipoprotein particles, transport by cellular extensions called cytonemes or by the proteolytic removal of both terminal lipidated peptides.

Tissue Location

Expressed in a number of embryonic tissues including the notochord, ventral neural tube, floor plate, lung bud, zone of polarizing activity and posterior distal mesenchyme of limbs In the adult, expressed in lung and neural retina

(Mouse) Shh Blocking Peptide (C-term) - Protocols

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

- [Blocking Peptides](#)