

DHH Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP19172c**Specification**

DHH Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [O43323](#)**DHH Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 50846**Other Names**

Desert hedgehog protein, DHH, HHG-3, Desert hedgehog protein N-product, Desert hedgehog protein C-product, DHH

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.

DHH Antibody (Center) Blocking Peptide - Protein Information**Name** DHH ([HGNC:2865](#))**Function**

[Desert hedgehog protein]: The C-terminal part of the desert hedgehog protein precursor displays an autoproteolysis and a cholesterol transferase activity (By similarity). Both activities result in the cleavage of the full-length protein into two parts (N- product and C-product) followed by the covalent attachment of a cholesterol moiety to the C-terminal of the newly generated N-product (By similarity). Both activities occur in the endoplasmic reticulum (By similarity). Functions in cell-cell mediated juxtacrine signaling (PubMed:24342078). Promotes endothelium integrity (PubMed:33063110). Binds to PTCH1 receptor, which functions in association with smoothened (SMO), to activate the transcription of target genes in endothelial cells (PubMed:33063110). In Schwann cells, controls the development of the peripheral nerve sheath and the transition of mesenchymal cells to form the epithelium-like structure of the perineurial tube (By similarity).

Cellular Location

[Desert hedgehog protein N-product]: Cell membrane {ECO:0000250|UniProtKB:Q62226};
Lipid-anchor {ECO:0000250|UniProtKB:Q62226}

DHH Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

DHH Antibody (Center) Blocking Peptide - Images

DHH Antibody (Center) Blocking Peptide - Background

This gene encodes a member of the hedgehog family. The hedgehog gene family encodes signaling molecules that play an important role in regulating morphogenesis. This protein is predicted to be made as a precursor that is autocatalytically cleaved; the N-terminal portion is soluble and contains the signalling activity while the C-terminal portion is involved in precursor processing. More importantly, the C-terminal product covalently attaches a cholesterol moiety to the N-terminal product, restricting the N-terminal product to the cell surface and preventing it from freely diffusing throughout the organism. Defects in this protein have been associated with partial gonadal dysgenesis (PGD) accompanied by minifascicular polyneuropathy. This protein may be involved in both male gonadal differentiation and perineurial development.

DHH Antibody (Center) Blocking Peptide - References

Chinchilla, P., et al. Cell Cycle 9(3):570-579(2010) Bishop, B., et al. Nat. Struct. Mol. Biol. 16(7):698-703(2009) Hegde, G.V., et al. Mol. Cancer Res. 6(12):1928-1936(2008) Nakamura, M., et al. Fukuoka Igaku Zasshi 99(5):102-106(2008) Canto, P., et al. Mol. Hum. Reprod. 11(11):833-836(2005)