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DHH Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19172c

Specification

DHH Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	O43323
Other Accession	Q61488, NP_066382.1
Reactivity	**Human**
Predicted	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**43577**
Antigen Region	**195-223**

DHH Antibody (Center) - Additional Information

Gene ID 50846

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

Target/Specificity
This DHH antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 195-223 amino acids from the Central region of human DHH.

Dilution
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
DHH Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

DHH Antibody (Center) - 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).

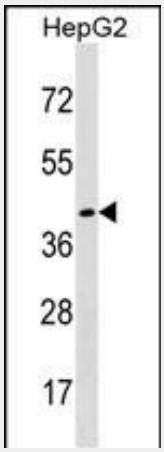
Cellular Location
[Desert hedgehog protein N-product]: Cell membrane {ECO:0000250|UniProtKB:Q62226}; Lipid-anchor {ECO:0000250|UniProtKB:Q62226}

DHH Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DHH Antibody (Center) - Images



DHH Antibody (Center) (Cat. #AP19172c) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the DHH antibody detected the DHH protein (arrow).

DHH Antibody (Center) - 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) - 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)