

# **Rabbit Anti-DHH antibody**

# SL5910R

<b>Product Name:</b>	DHH
Chinese Name:	DHH蛋白抗体
Alias:	Desert hedgehog (Drosophila) homolog; Desert hedgehog; Desert hedgehog homolog
	(Drosophila); Desert hedgehog protein precursor.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-
	500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	44kDa
Cellular localization:	The cell membraneExtracellular matrixSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human DHH:101-200/396
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of
	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	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.

# **Function:**

Intercellular signal essential for a variety of patterning events during development. May function as a spermatocyte survival factor in the testes. Essential for testes development.

#### **Subcellular Location:**

Desert hedgehog protein N-product: Cell membrane; Lipid-anchor; Extracellular side (By similarity). Note=The N-terminal peptide remains associated with the cell surface (By similarity).

Desert hedgehog protein C-product: Secreted, extracellular space (By similarity). Note=The C-terminal peptide diffuses from the cell (By similarity).

#### **Post-translational modifications:**

The C-terminal domain displays an autoproteolysis activity and a cholesterol transferase activity. Both activities result in the cleavage of the full-length protein and covalent attachment of a cholesterol moiety to the C-terminal of the newly generated N-terminal fragment (N-product). This covalent modification appears to play an essential role in restricting the spatial distribution of the protein activity to the cell surface. The N-product is the active species in both local and long-range signaling, whereas the C-product has no signaling activity (By similarity).

# DISEASE:

Defects in DHH may be the cause of partial gonadal dysgenesis with minifascicular neuropathy 46,XY (PGD) [MIM:607080]. PGD is characterized by the presence of a testis on one side and a streak or an absent gonad at the other, persistence of Muellerian duct structures, and a variable degree of genital ambiguity.

Defects in DHH may be the cause of complete pure gonadal dysgenesis 46,XY type (GDXYM) [MIM:233420]; also known as male-limited gonadal dysgenesis 46,XY. GDXYM is a type of hypogonadism in which no functional gonads are present to induce puberty in an externally female person whose karyotype is then found to be XY. The gonads are found to be non-functional streaks.

#### Similarity:

Belongs to the hedgehog family.

#### **SWISS:**

O43323

# Gene ID:

50846

# Database links:

Entrez Gene: 50846Human

Entrez Gene: 13363 Mouse

Entrez Gene: 84380Rat

Omim: 605423Human

SwissProt: O43323Human

SwissProt: Q61488Mouse

Unigene: 524382Human

Unigene: 324688Mouse

Unigene: 384073 Mouse

Unigene: 84274Rat

# **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.