

DHH Antibody / Desert hedgehog protein Antibody (FY13559)

Catalog No.	Formulation	Size
FY13559	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
UniProt	O43323
Applications	Western Blot : 0.5-1ug/ml
Limitations	For research use only, this DHH Antibody / Desert hedgehog protein Antibody is not intended for diagnostic or therapeutic use.

DHH Antibody by WB in human U251 cells. Western blot analysis using Desert hedgehog protein Antibody detects a prominent band near 44 kDa in human U251 whole-cell lysate (lane 1), consistent with the calculated molecular weight of approximately 44 kDa for the DHH precursor. The sample contained 30 ug protein loaded under reducing conditions and separated by 10% SDS-PAGE before transfer to nitrocellulose. The membrane was blocked with 5% nonfat milk and incubated with primary antibody at 0.5 ug/mL overnight at 4°C. Bound antibody was detected with HRP-conjugated secondary antibody and chemiluminescence. DHH undergoes proteolytic processing, but this blot documents the precursor-sized species.

Description

DHH Antibody / Desert hedgehog protein Antibody detects DHH, a secreted signaling protein in the hedgehog family that also includes sonic hedgehog and Indian hedgehog. Hedgehog proteins are produced as precursors and undergo processing steps that generate signaling-active forms. Their distribution and interaction with receiving cells help establish local developmental cues, allowing neighboring tissues to coordinate growth and differentiation.

Desert hedgehog is particularly important in gonadal development. In the developing testis, DHH produced by Sertoli cells signals to surrounding interstitial populations and contributes to the differentiation and function of Leydig cells. Disruption of this pathway can impair normal testicular organization and androgen-producing cell development. Pathogenic DHH

variants have been associated with disorders of sex development, highlighting its role in reproductive-system differentiation.

DHH also contributes to peripheral nerve biology. Schwann-cell-derived desert hedgehog is involved in the organization of the peripheral nerve sheath and the formation of a functional blood-nerve barrier. These roles illustrate that DHH signaling extends beyond gonadal tissues and helps coordinate interactions between specialized support cells and their surrounding environment.

Like other hedgehog ligands, DHH acts through a receptor system involving PTCH proteins and downstream regulation of SMO and GLI transcription factors. The precise response depends on the receiving cell and the availability of pathway components. DHH is therefore best understood as a context-specific developmental signal rather than a general growth-promoting factor. NSJ Bioreagents provides the DHH Antibody for research focused on hedgehog-family biology. A DHH Antibody can contribute to understanding the signaling events underlying gonadal differentiation and peripheral nerve organization.

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Application Notes

Investigators should determine the optimal dilution of the DHH Antibody / Desert hedgehog protein Antibody empirically for their experimental conditions.

Immunogen

The DHH Antibody was generated using a synthetic peptide corresponding to a sequence at the N-terminus of human DHH.

Storage

After reconstitution, keep the DHH Antibody at 4°C for up to one month. Alternatively, store aliquots at -20°C for up to six months. Avoid multiple freezing and thawing cycles.

Alternate Names

DHH antibody, Desert hedgehog protein antibody, desert hedgehog signaling molecule antibody, HHG 3 antibody, DHH rabbit polyclonal antibody