



Anti-Mouse Desert Hedgehog (N-terminal) (#6A12)

20180221BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	103-M287
Size:	100 µg
Lot. No.:	According to product label

Preparation: This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a rat immunized with purified mouse recombinant dhh N-terminal fragment. The IgG2 fraction of the culture supernatant was purified by Protein A/G affinity chromatography.

Target Background

Synonyms (Target):	Dhh; C78960
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Desert Hedgehog (Dhh) belongs to the highly conserved Hedgehog family of proteins which are involved in multiple developmental processes. Hedgehogs are synthesized as 45 kDa precursors that are cleaved autocatalytically. The 19 kDa N-terminal fragment remains membrane associated due to its cholesterol and palmitate modifications. Binding of this fragment to Patched receptors results in the loss of Patched repression of Smoothed signaling. Dhh binds both Patched and Patched 2 as well as Hedgehog interacting protein (Hip). Within the N-terminal peptide, mouse Dhh shares 97% and 100% amino acid (aa) sequence identity with human and rat Dhh, respectively. It shares 74% aa sequence identity with mouse Indian (Ihh) and Sonic hedgehog (Shh). Dhh is produced by Sertoli cells and is required for testis development and spermatogenesis. It induces steroidogenic factor 1 which is instrumental in promoting Leydig cell differentiation. It also promotes the deposition of basal lamina surrounding seminiferous tubules. In humans, mutations of Dhh are associated with pure gonadal dysgenesis. Dhh is expressed in the female by ovarian granulosa cells and the corpus luteum. Its upregulation in human ovarian cancer correlates positively with proliferative index and negatively with prognosis. Dhh is also expressed by Schwann cells and is upregulated following nerve injury. It induces the expression of Patched and Hip in nerve fibroblasts and promotes the formation of the connective tissue sheath surrounding peripheral nerves.

Database References Target

Protein RefSeq:	NP_031883.1
Uniprot ID:	Q61488
mRNA RefSeq:	NM_007857.4

Product Specifications

Host	Rat
Reactivity against	Mouse
Clonality	Monoclonal Antibody
Clone	(#6A12)
Isotype	IgG2
Purification	Protein G/A chromatography
Antigen	Mouse recombinant dhh N-terminal fragment
Formulation	lyophilized
Reconstitution buffer	PBS (sterile)

Reconstitution: Reconstitute the antibody with 200 µl sterile PBS and the final concentration is 500 µg/ml.

Stability: Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

Remarks: This antibody detects mouse dhh N-terminal polypeptide, but not C-terminal one in Western blotting.



AVOID REPEATED FREEZE AND THAW CYCLES!

Applications

The antibody can be used within the following applications:
WB, IHC

Recommended usage:

WB: 1:50-1000

IHC (Paraffin): 1:100-200

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!



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Handling/Applications

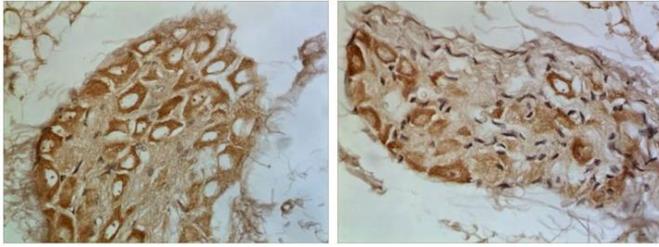


Fig. 1: The Kidney tissue samples from the Folic Acid-induced kidney injury model were fixed using 4% PFA at 4°C for overnight and embedded in paraffin. A 4 µm section was subjected to IHC (1:100-200).
Antigen retrieval: PK (10 µg/ml)