10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Ihh Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2704a

Product Information

Application	IHC-P, WB, E
Primary Accession	Q80XI9
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB10375
Calculated MW	49445
Antigen Region	1-30

Additional Information

Gene ID	16147
Other Names	Indian hedgehog
Target/Specificity	This Ihh antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human Ihh.
Dilution	IHC-P~~1:100~500 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	Ihh Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Ihh {ECO:0000313|EMBL:AAH46984.1, ECO:0000313|MGI:MGI:96533}
Function	Precursor of indian hedgehog, a morphogen that activates the smoothened signaling pathway, and which is essential for bone and cartilage development. The C-terminal part of the precursor displays an autoproteolysis and a cholesterol transferase activity, resulting (1) in the cleavage of the full-length protein into two parts, indian hedgehog protein N-product and C-product and

	(2) covalent attachment of a cholesterol moiety to the C-terminus of the newly generated N- product. Both autoproteolysis and a cholesterol transferase activities occur in the endoplasmic reticulum. Following additional lipidation, N- product acts as a morphogen, while C-product is degraded in the endoplasmic reticulum.
Cellular Location	Endoplasmic reticulum membrane {ECO:0000256|ARBA:ARBA00004586}. Secreted {ECO:0000256|ARBA:ARBA00004613} [Protein hedgehog N-product]: Cell membrane {ECO:0000256|RuleBase:RU280812}; Lipid-anchor {ECO:0000256|RuleBase:RU280812}

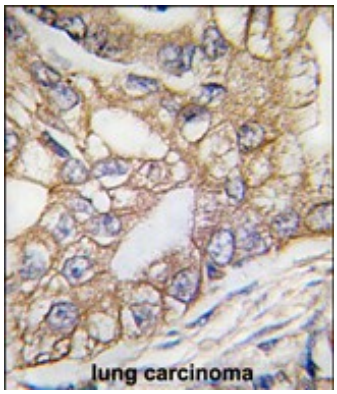
Background

Ihh (Indian hedgehog) is a critical and possibly direct regulator of joint development. In its absence, distribution and function of Gdf5-expressing interzone-associated cells are abnormal.

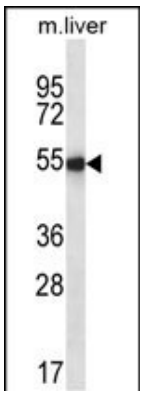
References

Kobayashi,T., Proc. Natl. Acad. Sci. U.S.A. 105 (6), 1949-1954 (2008) Gat-Yablonski,G.,J. Pediatr. Endocrinol. Metab. 20 (11), 1215-1222 (2007) Koyama,E., Ann. N. Y. Acad. Sci. 1116, 100-112 (2007)

Images



Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with Ihh Antibody (N-term) (Cat.#AP2704a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Ihh Antibody (Mouse N-term) (Cat. #AP2704a) western blot analysis in mouse liver tissue lysates (35ug/lane).This demonstrates the Ihh antibody detected the Ihh protein (arrow).

Citations

- Association of chloride intracellular channel 4 and Indian hedgehog proteins with survival of patients with pancreatic ductal adenocarcinoma.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.