

PTCH1 Polyclonal antibody

Catalog Number: 17520-1-AP

Featured Product

28 Publications

Basic Information

Catalog Number:

17520-1-AP

Size:

480 µg/ml

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

NM_000264

GeneID (NCBI):

5727

UNIPROT ID:

Q13635

Full Name:

patched homolog 1 (Drosophila)

Calculated MW:

161 kDa

Observed MW:

161 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:1000

IHC 1:50-1:200

Applications

Tested Applications:

IHC, WB, ELISA

Cited Applications:

WB, IF, IHC

Species Specificity:

human, mouse

Cited Species:

human, rat, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : mouse brain tissue, A431 cells, HeLa cells

IHC : human liver tissue,

Background Information

PTCH1 (patched homolog 1) is a twelve-pass transmembrane protein that acts as a receptor of Hedgehog signaling pathway (PMID: 8906794). Hedgehog pathway plays a critical role in embryonic development and tissue homeostasis, and its dysregulation has been implicated in many human diseases including congenital disorder and cancer (PMID: 23719536; 23532857). In the absence of Hedgehog proteins (SHH, IHH and DHH in humans), PTCH1 represses the activity of Smoothened (SMO). Binding of Hedgehog proteins to PTCH1 inhibits the repression of SMO, resulting in the activation of downstream targets through the Gli transcriptional effectors (PMID: 23719536; 17139287). The gene of PTCH1 is considered to be a tumor suppressor gene. Mutations of this gene have been associated with basal cell nevus syndrome, esophageal squamous cell carcinoma, trichoepitheliomas, transitional cell carcinomas of the bladder, as well as holoprosencephaly.

Notable Publications

Author	Pubmed ID	Journal	Application
Pai Pang	26427874	Biochem Biophys Res Commun	IHC
Matea Kurtović	36139698	Cancers (Basel)	WB
Diana Trnski	26385428	Biochim Biophys Acta	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

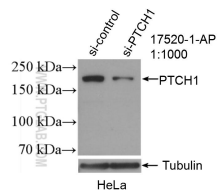
For technical support and original validation data for this product please contact:

T: 4006900926

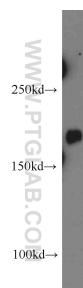
E: Proteintech-CN@ptglab.comW: ptgcn.com

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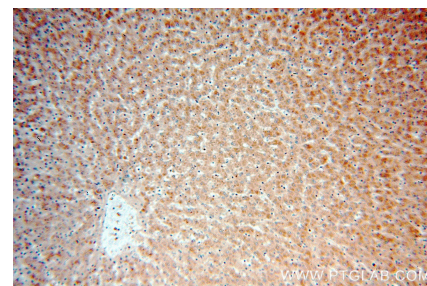
Selected Validation Data



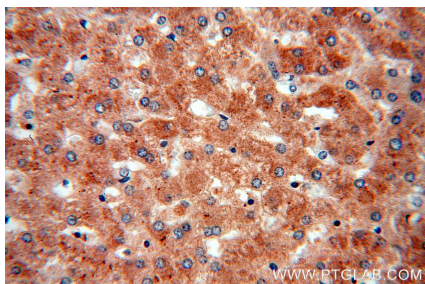
WB result of PTCH1 antibody (17520-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PTCH1 transfected HeLa cells.



mouse brain tissue were subjected to SDS PAGE followed by western blot with 17520-1-AP (PTCH1 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver using 17520-1-AP (PTCH1 antibody) at dilution of 1:50 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human liver using 17520-1-AP (PTCH1 antibody) at dilution of 1:50 (under 40x lens).