

For Research Use Only

PTCH1 Polyclonal antibody

Catalog Number: 17520-1-AP

Featured Product

27 Publications



Basic Information

Catalog Number: 17520-1-AP	GenBank Accession Number: NM_000264	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 480 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 5727	Recommended Dilutions: WB 1:500-1:1000 IHC 1:50-1:200
Source: Rabbit	Full Name: patched homolog 1 (Drosophila)	
Isotype: IgG	Calculated MW: 161 kDa	
	Observed MW: 161 kDa	

Applications

Tested Applications: IHC, WB, ELISA	Positive Controls: WB : mouse brain tissue, A431 cells, HeLa cells IHC : human liver tissue,
Cited Applications: IF, IHC, WB	
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	

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

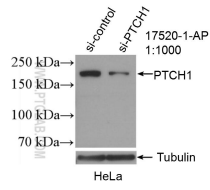
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

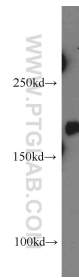
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

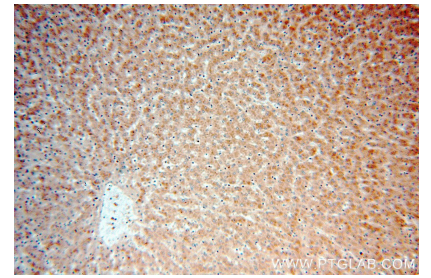
Selected Validation Data



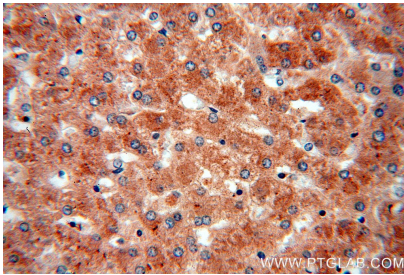
WB result of PTCH1 antibody (17520-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PTCH1 transfected HeLa cells.



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).