

For Research Use Only

# SHH Polyclonal antibody

Catalog Number: 20697-1-AP

Featured Product

80 Publications



## Basic Information

### Catalog Number:

20697-1-AP

### Size:

150ul, Concentration: 850 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### GenBank Accession Number:

NM\_000193

### GeneID (NCBI):

6469

### UNIPROT ID:

Q15465

### Full Name:

sonic hedgehog homolog (Drosophila)

### Calculated MW:

50 kDa

### Observed MW:

45-51 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:3000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF, FC (Intra), IP, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, mink

**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**: HeLa cells, rat kidney tissue, HepG2 cells, LNCaP cells, PC-3 cells, mouse liver tissue, rat liver tissue

**IP**: mouse liver tissue,

**IHC**: human liver cancer tissue, mouse kidney tissue, human pancreas cancer tissue, human ovary tumor tissue, mouse embryo tissue

## Background Information

SHH, also named as HHG-1, belongs to the hedgehog family. SHH binds to the patched (PTC) receptor, which functions in association with smoothened (SMO), to activate the transcription of target genes. In the absence of SHH, PTC represses the constitutive signaling activity of SMO. It regulates another target, the gli oncogene. The Shh protein is synthesized as a 45-kDa precursor that undergoes an autocatalytic processing event that produces a 19-kDa N-terminal product, responsible for all signaling activities, and a 25-kDa C-terminal fragment (PMID:10753901, PMID: 16282375). SHH can be detected precursor protein as 48-51-kDa polypeptides (PMID: 15292211).

## Notable Publications

Author	Pubmed ID	Journal	Application
Pai Pang	26427874	Biochem Biophys Res Commun	IHC, IF
Lanlan Li	36102251	J Am Heart Assoc	WB
Zipeng Xie	32931885	Cancer Lett	WB

## Storage

### Storage:

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

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

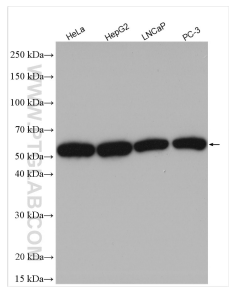
For technical support and original validation data for this product please contact:

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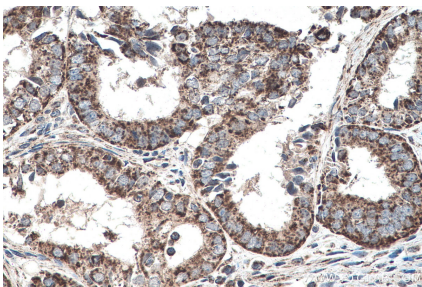
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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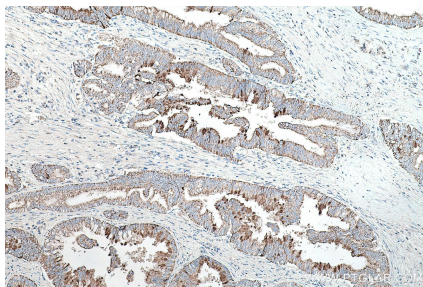
Selected Validation Data



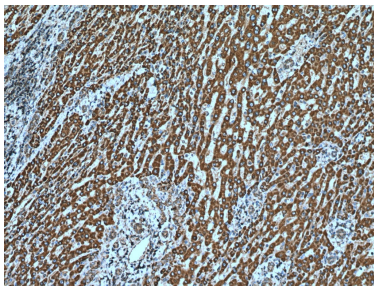
Various lysates were subjected to SDS PAGE followed by western blot with 20697-1-AP (SHH antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



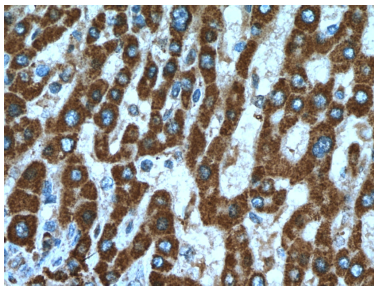
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 20697-1-AP (SHH antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



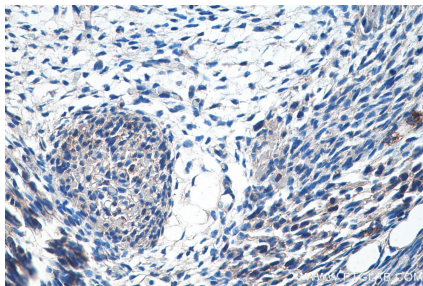
Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 20697-1-AP (SHH antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



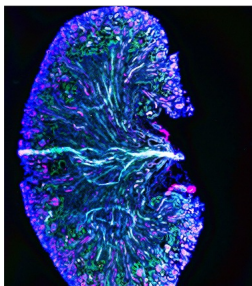
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 20697-1-AP (SHH antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



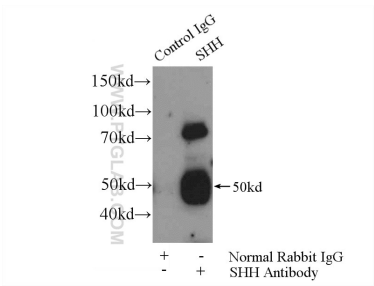
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 20697-1-AP (SHH antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



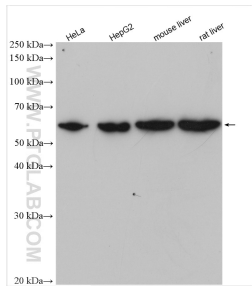
Immunohistochemical analysis of paraffin-embedded mouse embryo tissue slide using 20697-1-AP (SHH antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



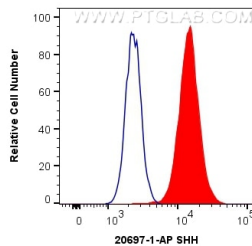
Frozen tissue section of adult mouse kidney was stained for acetylated  $\alpha$ -tubulin (magenta, Cat. No CL488-66200), CD31/PECAM-1 (white), and Shh (green, Cat. No 20697-1-AP) with DAPI as a counterstain for visualizing the nucleus (blue). acetylated  $\alpha$ -tubulin stains primary cilia and was conjugated to Coralite-488 fluorescent dye and psedocolored to magenta. CD31 stains endocardial/endothelial cells and was visualized with an Alexa Fluor 647



IP result of anti-SHH (IP:20697-1-AP, 4ug; Detection:20697-1-AP 1:500) with mouse liver tissue lysate 6400ug.



Various lysates were subjected to SDS PAGE followed by western blot with 20697-1-AP (SHH antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



1X10<sup>6</sup> HepG2 cells were intracellularly stained with 0.4 ug Anti-Human SHH (20697-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).