



## Patched Rabbit pAb

Patched Rabbit pAb Catalog # AP94028

# **Specification**

## Patched Rabbit pAb - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW
Physical State
Immunogen

Epitope Specificity Isotype **Purity** affinity purified by Protein A

Buffer

SUBCELLULAR LOCATION SIMILARITY

SUBUNIT Post-translational modifications DISEASE IHC-P, IHC-F, IF

O86XG7

Human

Rabbit

Polyclonal

161 KDa

Liquid

KLH conjugated synthetic peptide derived from human Patched

1351-1447/1447

0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Membrane. Belongs to the patched family. Contains 1 SSD (sterol-sensing) domain. Interacts with SNX17. Interacts with IHH. Glycosylation is necessary for SHH binding. Defects in PTCH1 are probably the cause of basal cell nevus syndrome (BCNS) [MIM:109400]; also known as Gorlin syndrome or Gorlin-Goltz syndrome. BCNS is an autosomal dominant disease characterized by nevoid basal cell carcinomas (NBCCS) and developmental abnormalities such as rib and craniofacial alterations, polydactyly, syndactyly, and spina bifida. In addition, the patients suffer from a multitude of tumors like basal cell carcinomas (BCC), fibromas of the ovaries and heart, cysts of the skin, jaws and mesentery, as well as medulloblastomas and meningiomas. PTCH1 is also mutated in squamous cell carcinoma (SCC). Could also be associated with large body size observed in BCNS patients. Defects in PTCH1 are a cause of sporadic basal cell carcinoma (BCC) [MIM:605462]. Defects in PTCH1 are the cause of holoprosencephaly type 7 (HPE7) [MIM:610828]. Holoprosencephaly (HPE) [MIM:236100] is the most common



Important Note

structural anomaly of the brain, in which the developing forebrain fails to correctly separate into right and left hemispheres. Holoprosencephaly is genetically heterogeneous and associated with several distinct facies and phenotypic variability. This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

# **Background Descriptions**

PTCH (Patched protein homolog 1) is a receptor for sonic hedgehog (SHH), indian hedgehog (IHH) and desert hedgehog (DHH). PTCH associates with the smoothened protein (SMO) to transduce the hedgehog's proteins signal.PTCH has a tumor suppressor function, as inactivation of this protein is probably a necessary, if not sufficient step for tumorigenesis. PTCH is expressed in the adult brain, lung, liver, heart, placenta, skeletal muscle, pancreas and kidney. It is also expressed in tumor cells but not in normal skin. During development PTCH is found in all major target tissues of sonic hedgehog, such as the ventral neural tube, somites, and tissues surrounding the zone of polarizing activity of the limb bud. Defects in PTCH are probably the cause of basal cell nevus syndrome also known as Gorlin syndrome or Gorlin-Goltz syndrome.

# Patched Rabbit pAb - Additional Information

## Target/Specificity

In the adult, expressed in brain, lung, liver, heart, placenta, skeletal muscle, pancreas and kidney. Expressed in tumor cells but not in normal skin.

### **Dilution**

<span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \> <span class
="dilution\_IHC-F">IHC-F~~N/A</span><br \> <span class = "dilution\_IF">IF~~1:50~200</span>

#### **Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

## **Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

# Patched Rabbit pAb - Protein Information

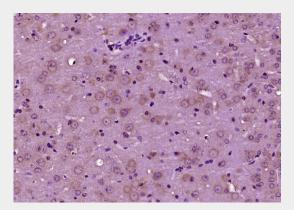
## Patched Rabbit pAb - Protocols

Provided below are standard protocols that you may find useful for product applications.

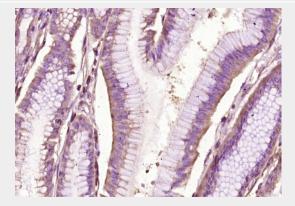
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



## Patched Rabbit pAb - Images



Paraformaldehyde-fixed, paraffin embedded (mouse brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Patched) Polyclonal Antibody, Unconjugated (AP94028) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human gastric carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Patched) Polyclonal Antibody, Unconjugated (AP94028) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

# Patched Rabbit pAb - Background

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