

### Shh Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21229a

# **Specification**

## **Shh Antibody (N-term) - Product Information**

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype

WB, IHC-P, IF, FC,E 015465 062226, 063673 Human, Mouse, Rat Rabbit polyclonal

Rabbit IgG

## Shh Antibody (N-term) - Additional Information

#### **Gene ID 6469**

### **Other Names**

Sonic hedgehog protein

## Target/Specificity

This Shh antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 58-91 amino acids from the N-terminal region of mouse Shh.

### **Dilution**

WB~~1:2000 IHC-P~~1:25 IF~~1:25 FC~~1:25 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**

Shh Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Shh Antibody (N-term) - Protein Information

Name SHH (HGNC:10848)





**Function** [Sonic hedgehog protein]: The C-terminal part of the sonic hedgehog protein precursor displays an autoproteolysis and a cholesterol transferase activity (By similarity). Both activities result in the cleavage of the full-length protein into two parts (ShhN and ShhC) followed by the covalent attachment of a cholesterol moiety to the C-terminal of the newly generated ShhN (By similarity). Both activities occur in the endoplasmic reticulum (By similarity). Once cleaved, ShhC is degraded in the endoplasmic reticulum (By similarity).

### **Cellular Location**

[Sonic hedgehog protein]: Endoplasmic reticulum membrane. Golgi apparatus membrane. Secreted Note=Co-localizes with HHAT in the ER and Golgi membrane

# Shh Antibody (N-term) - Protocols

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

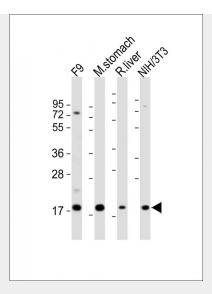
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Shh Antibody (N-term) - Images

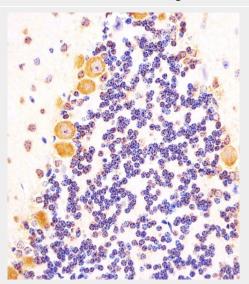


Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Hela (Human Cervical epithelial adenocarcinoma cell line) cells labeling Shh with AP21229a at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (NK179883) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm and membrane staining on Hela cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (PD18466410) at 1/100 dilution (red). The nuclear counter stain is DAPI (blue).



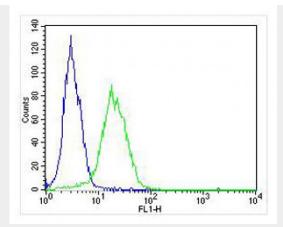


All lanes: Anti-Shh Antibody (N-term) at 1:2000 dilution Lane 1: F9 whole cell lysate Lane 2: mouse stomach lysates Lane 3: rat liver whole cell lysates Lane 4: NIH/3T3 lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size: 48 kDa Blocking/Dilution buffer: 5% NFDM/TBST. Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 84 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



AP21229a staining Shh in mouse cerebellum sections by Immunohistochemistry (IHC-P paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.





Overlay histogram showing HT-29 cells stained with AP21229a (green line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP12735b, 1:25 dilution) for 60 min at 37 $^{\circ}$ C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) (1583138) at 1/400 dilution for 40 min at 37 $^{\circ}$ C. Isotype control antibody (blue line) was rabbit IgG1 (1 $\mu$ g/1x10 $^{\circ}$ 6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.