

**(Mouse) Shh Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP21229a**

## Specification

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

Application	IF, WB, IHC-P, FC,E
Primary Accession	<a href="#">Q62226</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	47773

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

**Gene ID** 20423

#### Target/Specificity

This mouse 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

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

#### 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

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

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

**Name** Shh {ECO:0000312|MGI:MGI:98297}

**Synonyms** Hhg1

**Function** [Sonic hedgehog protein]: The C-terminal part of the sonic hedgehog protein precursor displays an autoproteolysis and a cholesterol transferase activity (PubMed:[7736596](#),

PubMed:[7891723](#), PubMed:[8824192](#)). 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 (PubMed:[8824192](#)). Both activities occur in the reticulum endoplasmic (PubMed:[21357747](#)). Once cleaved, ShhC is degraded in the endoplasmic reticulum (PubMed:[21357747](#)).

#### Cellular Location

[Sonic hedgehog protein]: Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q15465}. Golgi apparatus membrane {ECO:0000250|UniProtKB:Q15465}. Note=Co-localizes with HHAT in the ER and Golgi membrane. {ECO:0000250|UniProtKB:Q15465}

#### Tissue Location

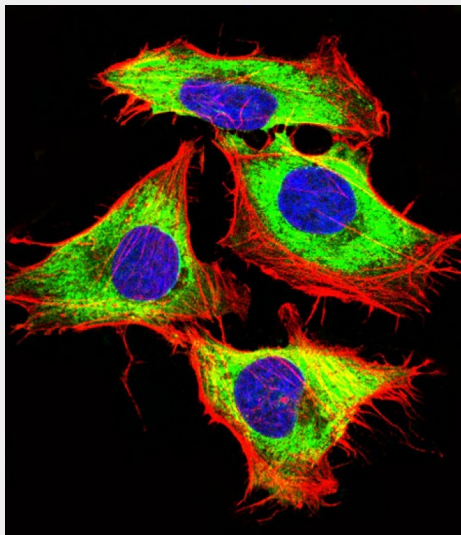
Expressed in a number of embryonic tissues including the notochord, ventral neural tube, floor plate, lung bud, zone of polarizing activity and posterior distal mesenchyme of limbs In the adult, expressed in lung and neural retina

#### (Mouse) Shh Antibody (N-term) - Protocols

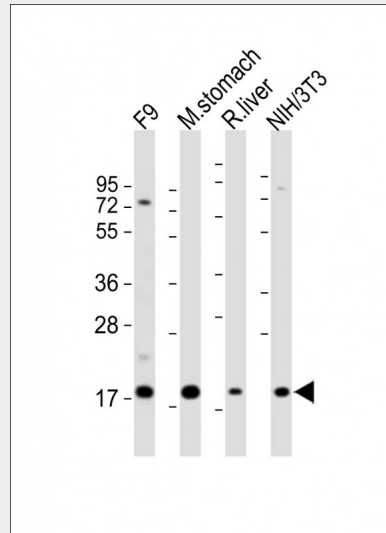
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

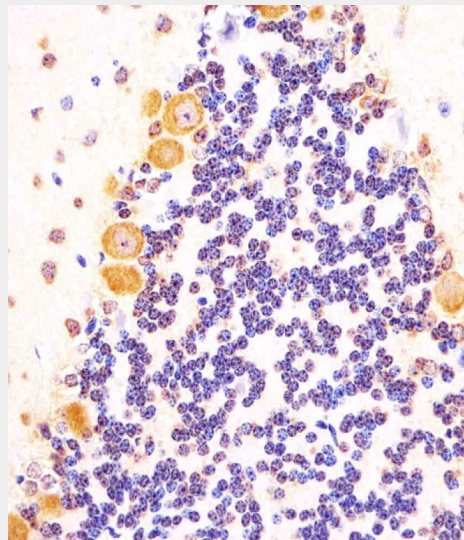
#### (Mouse) Shh Antibody (N-term) - Images



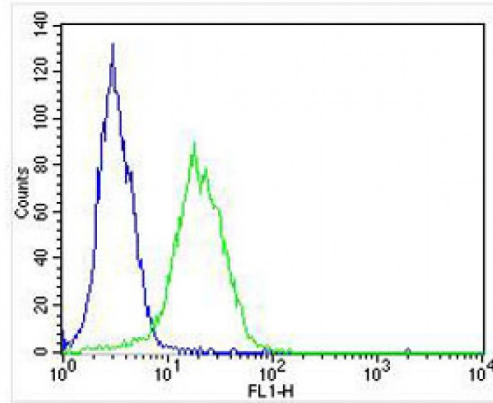
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human Cervical epithelial adenocarcinoma cell line) cells labeling Shh with AP21229a at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (NK179883) secondary antibody at 1/200 dilution (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 (Mouse) 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 incubated 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°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°C. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >10,000 events was performed.