

(Mouse) Shh Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21229a

Product Information

Application FC, IHC-P, IF, WB, E

Primary Accession <u>Q62226</u>

Reactivity Human, Rat, Mouse

Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Clone Names RB52387
Calculated MW 47773

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 FC~~1:25 IHC-P~~1:100~500 IF~~1:25 WB~~1:2000 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 (Mouse) Shh Antibody (N-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

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:<u>8824192</u>). Both activities occur in the reticulum endoplasmic (PubMed:<u>21357747</u>). Once cleaved, ShhC is degraded in the endoplasmic reticulum (PubMed:<u>21357747</u>).

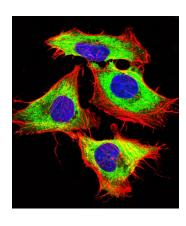
Cellular Location

[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}

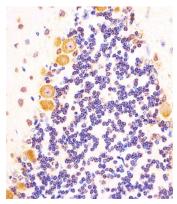
Tissue Location

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

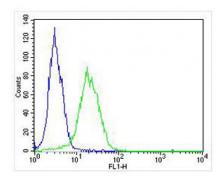
Images



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).



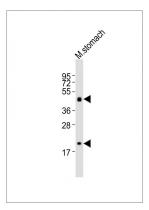
AP21229a staining (Mouse) Shh in mouse cerebellum sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (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 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°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit lgG (H+L) (1583138) at 1/400 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1 μ g/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

Anti-Shh Antibody (N-term)at 1:2000 dilution + mouse stomach 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.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.