(Mouse) Shh Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5359

Specification

(Mouse) Shh Antibody (C-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	Q62226
Reactivity	**Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**M=48;Rat=48 KDa**
Isotype	**Rabbit IgG**
Antigen Source	**HUMAN**

(Mouse) Shh Antibody (C-term) - Additional Information

Gene ID 20423

Antigen Region
397-431

Other Names
Sonic hedgehog protein, SHH, HHG-1, Sonic hedgehog protein N-product, Sonic hedgehog protein C-product, Shh, Hhg1

Dilution
WB~~1:1000
IHC-P~~1:25

Target/Specificity
This (Mouse) Shh antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 397-431 amino acids from the C-terminal region of Mouse Shh.

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

(Mouse) Shh Antibody (C-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
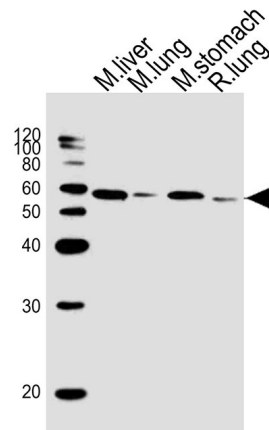
(Mouse) Shh Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

(Mouse) Shh Antibody (C-term) - Images
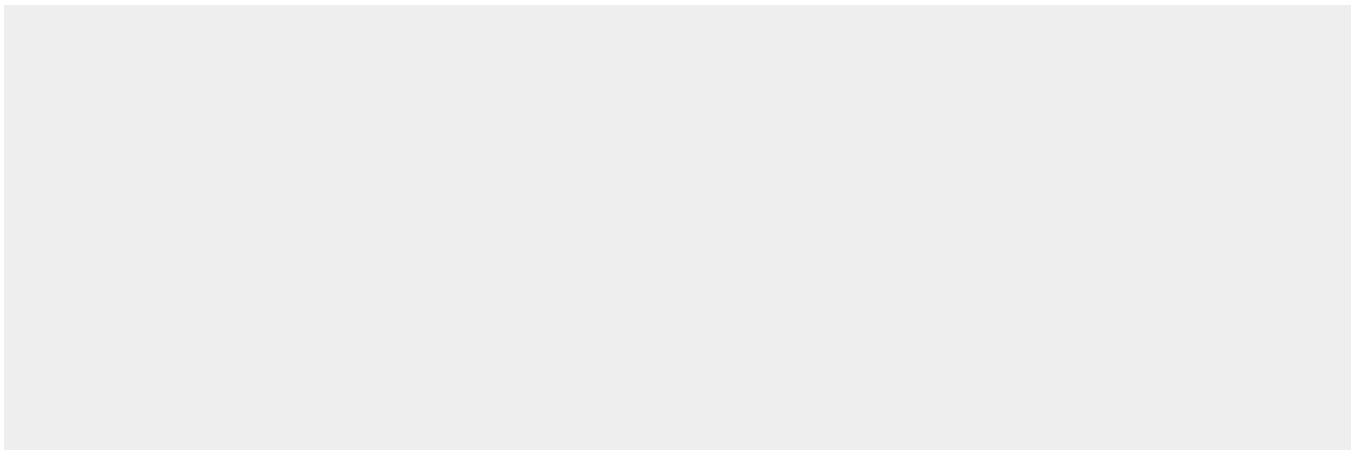
All lanes : Anti-Shh Antibody (C-term)(AW5359) at 1/1000 dilution Lane 1: mouse liver lysates Lane 2: mouse lung lysates Lane 3: mouse stomach lysates Lane 4: rat lung lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution Predicted band size : 57 kDa Blocking/Dilution buffer: 5% NFDM/TBST.
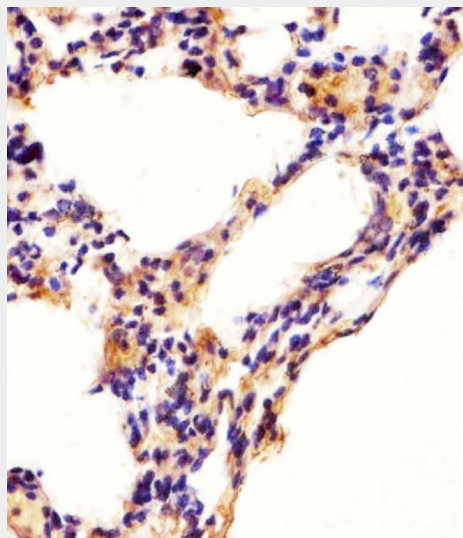
Immunohistochemical analysis of paraffin-embedded M. lung section using (Mouse) Shh Antibody (C-term)(Cat#AW5359). AW5359 was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

(Mouse) Shh Antibody (C-term) - Background

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. Also regulates another target, the gli oncogene. Intercellular signal essential for a variety of patterning events during development: signal produced by the notochord that induces ventral cell fate in the neural tube and somites, and the polarizing signal for patterning of the anterior-posterior axis of the developing limb bud. Displays both floor plate- and motor neuron-inducing activity. The threshold concentration of N-product required for motor neuron induction is 5-fold lower than that required for floor plate induction (By similarity).

(Mouse) Shh Antibody (C-term) - References

Echelard Y.,et al.Cell 75:1417-1430(1993).
McMahon A.P.,et al.Submitted (NOV-1997) to the EMBL/GenBank/DDBJ databases.
Chang D.T.,et al.Development 120:3339-3353(1994).
Carninci P.,et al.Science 309:1559-1563(2005).
Roelink H.,et al.Cell 81:445-455(1995).