

SHH Rabbit Polyclonal Antibody

Catalog No: #55301

Package Size: #55301-1 50ul #55301-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

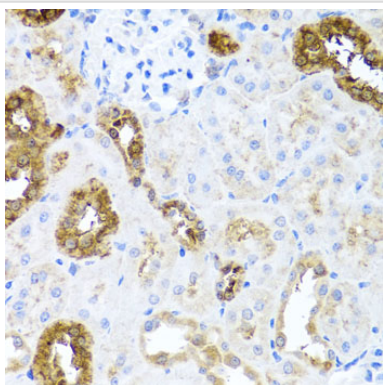
Description

Product Name	SHH Rabbit Polyclonal Antibody
Host Species	Rabbit
Clonality	Polyclonal
Isotype	IgG
Purification	Affinity purification
Applications	WB,IHC,IF
Species Reactivity	Human,Mouse,Rat
Immunogen Description	A synthetic peptide of human SHH
Conjugates	Unconjugated
Other Names	SHH;HHG1;HLP3;HPE3;MCOPCB5;SMMCI;TPT;TPTPS
Accession No.	Swiss Prot:Q15465GeneID:6469
Calculated MW	49kDa
SDS-PAGE MW	50kDa
Formulation	Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.
Storage	Store at -20°C. Avoid freeze / thaw cycles.

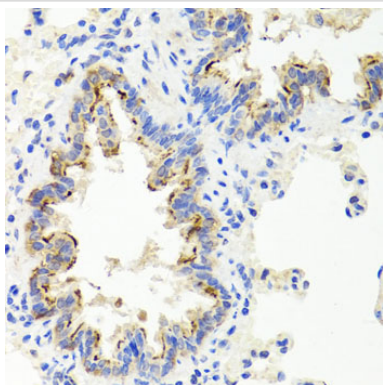
Application Details

WB□1:500 - 1:2000IHC□1:50 - 1:100IF□1:50 - 1:200

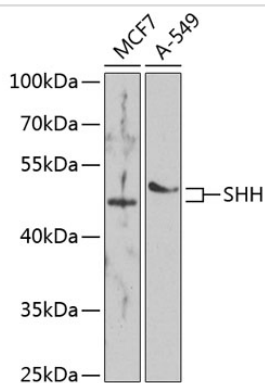
Images



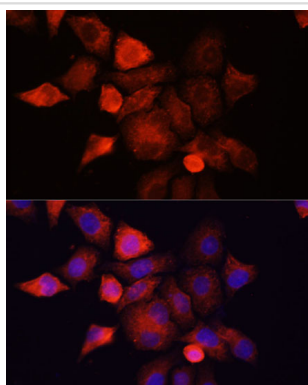
Immunohistochemistry of paraffin-embedded rat kidney using SHH at dilution of 1:100 (40x lens).



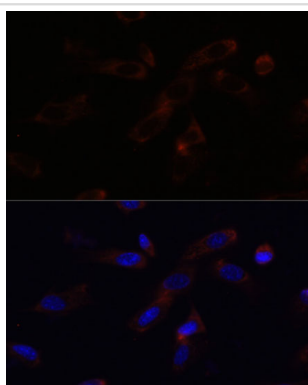
Immunohistochemistry of paraffin-embedded rat lung using SHH at dilution of 1:100 (40x lens).



Western blot analysis of extracts of various cell lines, using SHH at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Enhanced Kit (RM00021). Exposure time: 60s.



Immunofluorescence analysis of HeLa cells using SHH Polyclonal at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of NIH-3T3 cells using SHH Polyclonal at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.

Background

This gene encodes a protein that is instrumental in patterning the early embryo. It has been implicated as the key inductive signal in patterning of the ventral neural tube, the anterior-posterior limb axis, and the ventral somites. Of three human proteins showing sequence and functional similarity to the sonic hedgehog protein of *Drosophila*, this protein is the most similar. The protein is made as a precursor that is autocatalytically cleaved; the N-terminal portion is soluble and contains the signalling activity while the C-terminal portion is involved in precursor processing. More importantly, the C-terminal product covalently attaches a cholesterol moiety to the N-terminal product, restricting the N-terminal product to the cell surface and preventing it from freely diffusing throughout the developing embryo. Defects in this protein or in its signalling pathway are a cause of holoprosencephaly (HPE), a disorder in which the developing forebrain fails to correctly separate into right and left hemispheres. HPE is manifested by

facial deformities. It is also thought that mutations in this gene or in its signalling pathway may be responsible for VACTERL syndrome, which is characterized by vertebral defects, anal atresia, tracheoesophageal fistula with esophageal atresia, radial and renal dysplasia, cardiac anomalies, and limb abnormalities. Additionally, mutations in a long range enhancer located approximately 1 megabase upstream of this gene disrupt limb patterning and can result in preaxial polydactyly.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.