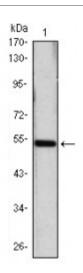


## **Anti-Shh antibody**



**Description** 

Mouse monoclonal to Shh.

Model STJ98379

**Host** Mouse

**Reactivity** Human

**Applications** ELISA, WB

**Immunogen** Purified recombinant fragment of human Shh expressed in E. Coli.

**Gene ID** 6469

Gene Symbol SHH

**Dilution range** WB 1:500-1:2000ELISA 1:10000

**Specificity** Shh Monoclonal Antibody detects endogenous levels of Shh protein.

**Tissue Specificity** Expressed in fetal intestine, liver, lung, and kidney. Not expressed in adult

tissues.

**Purification** Affinity purification

Clone ID 8G3

**Note** For Research Use Only (RUO).

Protein Name Sonic hedgehog protein SHH HHG-1 Shh unprocessed N-terminal signaling

and C-terminal autoprocessing domains ShhNC Sonic hedgehog protein N-

product ShhN Shh N-terminal processed signaling domains ShhNp

**Clonality** Monoclonal

**Conjugation** Unconjugated

Isotype IgG1

**Formulation** Ascitic fluid containing 0.03% sodium azide.

**Storage Instruction** Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:10848OMIM:135750</u>

Alternative Names Sonic hedgehog protein SHH HHG-1 Shh unprocessed N-terminal signaling

and C-terminal autoprocessing domains ShhNC Sonic hedgehog protein N-

product ShhN Shh N-terminal processed signaling domains ShhNp

**Function** 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. Activates the transcription of target genes by interacting with its receptor PTCH1 to prevent normal inhibition by PTCH1 on the constitutive

signaling activity of SMO.

Sequence and Domain Family The sonic hedgehog protein N-product binds calcium and zinc ions; this

stabilizes the protein fold and is essential for protein-protein interactions

mediated by this domain.

Cellular Localization Sonic hedgehog protein C-product: Secreted, extracellular space. The C-

terminal peptide diffuses from the cell. Sonic hedgehog protein N-product: Cell membrane. The N-product either remains associated with lipid rafts at the cell surface, or forms freely diffusible active multimers with its hydrophobic

lipid-modified N- and C-termini buried inside.

**Post-translational** The C-terminal domain displays an autoproteolysis activity and a cholesterol transferase activity. Both activities result in the cleavage of the full-length

transferase activity. Both activities result in the cleavage of the full-length protein and covalent attachment of a cholesterol moiety to the C-terminal of the newly generated N-terminal fragment (N-product). The N-product is the active species in both local and long-range signaling, whereas the C-product has no signaling activity.; Cholesterylation is required for N-product targeting to lipid rafts and multimerization. N-palmitoylation of Cys-24 by HHAT is

required for N-product multimerization and full activity.