

RecomAb™

SHH recombinant monoclonal antibody, clone R06-9H9

Catalog # RAB01902 Size 100 uL

Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human SHH.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against a synthetic peptide corresponding to human SHH.
Theoretical MW (kDa)	Calculated MW: 50 kD
Reactivity	Human, Mouse
Form	Liquid
Purification	Affinity purification
Isotype	IgG
Recommend Usage	Immunofluorescence (1:50-1:200) Immunohistochemistry (1:50-1:100) Western Blot (1:500-1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 50 mM Tris-Glycine, pH 7.4 (0.15 M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA)
Storage Instruction	Store at -20 °C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot
- Immunofluorescence

- Immunoprecipitation

Gene Info — SHH

Entrez GeneID [6469](#)

Protein Accession# [Q15465](#)

Gene Name SHH

Gene Alias HHG1, HLP3, HPE3, MCOPCB5, SMMCI, TPT, TPTPS

Gene Description sonic hedgehog homolog (Drosophila)

Omim ID [120200](#) [142945](#) [147250](#) [174500](#) [600725](#)

Gene Ontology [Hyperlink](#)

Gene Summary 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. [provided by RefSeq]

Other Designations sonic hedgehog

Pathway

- [Basal cell carcinoma](#)
- [Hedgehog signaling pathway](#)
- [Pathways in cancer](#)

Disease

- [Cleft Lip](#)
- [Cleft Palate](#)
- [Genetic Predisposition to Disease](#)
- [Holoprosencephaly](#)
- [Kidney Failure](#)
- [Parkinson disease](#)
- [Sleep Apnea](#)
- [Syndrome](#)
- [Thyroid Neoplasms](#)