

32-6537: SHH (C24II) Human

Alternative Name : Sonic Hedgehog, MCOPCB5, SMMCI, HLP3, HPE3, Sonic Hedgehog (Drosophila) Homolog, Sonic Hedgehog Homolog (Drosophila), Sonic Hedgehog Homolog, Sonic Hedgehog Protein, TPTPS, HHG-1, HHG1, TPT, SHH (C24II).

Description

Source: Escherichia Coli.

Sterile filtered colorless solution.

Sonic Hedgehog is part of a small group of secreted proteins which are vital for development in both vertebrates and invertebrates. 3 mammalian hedgehog genes (sonic, desert, Indian) share about 60% homology. The Human Sonic Hedgehog is 99% homologous to the mouse gene. Sonic Hedgehog is a protein that is vital in guiding the early embryo. It has been associated as the major inductive signal in patterning of the ventral neural tube, the anterior-posterior limb axis, and the ventral somites. Sonic Hedgehog binds to the patched receptor, which functions in association with smoothened, to activate the transcription of target genes. In the absence of sonic Hedgehog, patched receptor represses the constitutive signaling activity of smoothened. Sonic Hedgehog also regulates another factor, the gli oncogene. Sonic Hedgehog intercellular signal is essential for a various 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. Sonic Hedgehog exhibits both floor plate- and motor neuron-inducing activity. Mutations in a long-range Sonic Hedgehog enhancer located in an intron of the limb region 1 gene result in preaxial polydactyly.

SHH Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 176 amino acids (24-197 a.a.) and having a molecular mass of 19.8kDa (The Cys at position 24 has been replaced with 2 Ile).The SHH is purified by proprietary chromatographic techniques.

Product Info

Amount :	2 µg / 10 µg
Purification :	Greater than 95% as determined by SDS-PAGE.
Content :	The SHH protein solution (1mg/ml) containing Phosphate buffered saline (pH7.4).
Storage condition :	Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Avoid multiple freeze-thaw cycles.
Amino Acid :	MIIGPGRGFG KRRHPKLTLP LAYKQFIPNV AEKTLGASGR YEGKISRNSR RFKELTPNYN PDIIFKDEEN TGADRLMTQR CKDKLNALAI SVMNQWPGVK LRVTEGWDED GHHSEESLHY EGRAVDITTS DRDRSKYGML ARLAVEAGFD WVYYESKAHI HCSVKAENSV AAKSGG