

Sonic HedgeHog Active Protein | mSHH active protein

Recombinant Mouse Sonic HedgeHog

CATALOG # AAA10853	HOST E Coli
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PRODUCT SYNONYMS

Sonic HedgeHog; Recombinant Mouse Sonic HedgeHog; SHH Mouse; Sonic Hedgehog Mouse Recombinant; SHH; HHG-1; HHG1; Sonic hedgehog protein; mSHH active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 97.0% as determined by SDS-PAGE.
Form/Format	Lyophilized from a concentrated (1mg/ml) solution in water containing 10mM Na ₂ PO ₄ pH-7.5. Sterile Filtered White lyophilized (freeze-dried) powder.
Sequence	MIIGPGRGFG KRRHPKKLTP LAYKQFIPNV AEKTLGASGR YEGKITRNS RFKELTPNYN PDIIFKDEEN TGADRLMTQR CKDKLNALAI SVMNQWPGVK LRVTEGWDED GHHSEESLHY EGRAVDITTS DRDRSKYGML ARLAVEAGFD WVYYESKAHI HCSVKAENSV AAKSGG
Sequence Length	437
Solubility	It is recommended to reconstitute the lyophilized Sonic Hedgehog in sterile 18M ² -cm H ₂ O not less than 100 ug/ml, which can then be further diluted to other aqueous solutions.
Biological Activity	Determined by the dose-dependent induction of alkaline phosphatase production by C3H/10T1/2 (CCL-226) fibroblasts and is typically 0.48-0.72 ug/ml.
Preparation and Storage	Lyophilized Mouse Sonic HedgeHog although stable at room temperature for 3 weeks, should be stored desiccated below -18 degree C. Upon reconstitution Sonic HedgeHog should be stored at 4 degree C between 2-7 days and for future use below -18 degree C. Please prevent freeze-thaw cycles.

ADDITIONAL INFORMATION

Related Product Information for mSHH active protein	Description: Sonic Hedgehog Recombinant Mouse produced in E Coli is a single, non-glycosylated polypeptide chain containing 176 amino acids and having a molecular mass of 19.8 kDa. The Mouse Sonic Hedgehog is 99% homologous to the human gene. Cysteine at position 25 has been substituted with Ile. The Sonic HedgeHog is purified by proprietary chromatographic techniques. Introduction: Recombinant Mouse Sonic Hedgehog is part of a small group of secreted proteins that are vital for development in both vertebrates and invertebrates. 3 mammalian hedgehog genes (sonic, desert, Indian) share about 60% homology. The Mouse Sonic Hedgehog is 99% homologous to the human 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.
Product Categories/Family for mSHH active protein	Cytokines and Growth Factors; Cytokines; Hedgehog Protein

NCBI AND UNIPROT INFORMATION

NCBI GI #	21617861
NCBI GeneID	20423
NCBI Accession #	NP_033196.1
NCBI GenBank Nucleotide #	NM_009170.3
UniProt Accession #	Q62226
Molecular Weight	47,773 Da
NCBI Official Full Name	sonic hedgehog protein
NCBI Official Synonym Full Names	sonic hedgehog
NCBI Official Symbol	Shh
NCBI Official Synonym Symbols	Hx; Dsh; Hhg1; Hxl3; M100081; 9530036O11Rik
NCBI Protein Information	sonic hedgehog protein; HHG-1; hemimelic extra toes; short digits
UniProt Protein Name	Sonic hedgehog protein
UniProt Gene Name	Shh
UniProt Synonym Gene Names	Hhg1; SHH
UniProt Entry Name	SHH_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-mshh-active-protein/sonic-hedgehog/10853>