Product Data Sheet

Product Name:	SHH Human, His
Cat. No.:	GP20881
Batch No.:	1

Product Data

Purity	>98%	Source	Escherichia Coli.
Phycical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	SHH; HHG-1; HHG1; Sonic hedgehog protein; TPT; HLP3; HPE3; SMMCI; TPTPS; MCOPCB5.		
Amino Acid Sequence	MCGPGRGFGK RRHPKKLTPL AYKQFIPNVA EKTLGASGRY EGKISRNSER FKELTPNYNP DIIFKDEENT GADRLMTQRC KDKLNALAISVMNQWPGVKL RVTEGWDEDG HHSEESLHYE GRAVDITTSD RDRSKYGMLA RLAVEAGFDW VYYESKAHIH CSVKAENSVA AKSGGLEHHH HHH.		
Formulation	SHH Human solution containing 20mM Tris HCL pH-8, 0.1M NaCl, & 10% glycerol.		

Introduction

Recombinant Human 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 Human Sonic Hedgehog is 99% homologous to the mouse gene. Sonic HedgeHog is a protein that is vital in guding 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

Stability

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).Please prevent freeze thaw cycles.

Background

Sonic HedgeHog Recombinant Human produced in E.Coli is a single, non-glycosylated polypeptide chain containing 183 amino acids and having a molecular mass of 20.7kDa.The Sonic HedgeHog is fused to 8 amino acid His-Tag at C-terminus and purified by proprietary chromatographic techniques.