

Active Sonic Hedgehog, Murine Recombinant (M-SHH)

CATALOG NO :	4020-25	25 µg
	4020-100	100 µg
	4020-1000	1 mg
SOURCE:	<i>E. coli</i>	
PURITY:	> 97% by SDS-PAGE and HPLC analyses Endotoxin level is < 0.01 ng per µg rm-SHH	
MOLECULAR WT:	19.8 kDa	
FORM:	Lyophilized from a 10 mM sodium phosphate buffer (pH 7.5)	

RECONSTITUTION:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water to a concentration of 0.1-0.5 mg/ml, which can be further diluted into other aqueous solutions.

STORAGE CONDITIONS:

The lyophilized human Sonic Hedgehog is very stable at -20 °C. Upon reconstitution the material should be aliquoted and frozen at -20 °C. It is recommended to add a carrier protein (0.1% HSA or BSA) for long term storage.

DESCRIPTION:

Recombinant Mouse Sonic Hedgehog is a member of a small group of secreted proteins that are essential for development in both vertebrates and invertebrates. Three mammalian hedgehog genes (sonic, desert, Indian) share about 60% homology. The Mouse Sonic Hedgehog is 99% homologous to the human gene. Cysteine at position 25 has been substituted with Ile. Mouse SHH is a non-glycosylated polypeptide consisting of 176 amino acids with a molecular weight of 19,800 Da.

BIOLOGICAL ACTIVITY:

Mouse SHH is fully biologically active when compared to standard. Determined by its ability to induce alkaline phosphatase production by C3H10T1/2 fibroblasts, with an expected ED₅₀ in the range of 0.03 – 0.30 ug/ml.

AMINO ACID SEQUENCE:

MIIGPGRGFG KRRHPKLLTP LAYKQFIPNV AEKTLGASGR YEGKITRNSE RFKELTPNYN
PDIIKFDEEN TGADRLMTQR CKDKLNALAI SVMNQWPGVK LRVTEGWDED
GHHSEESLHY EGRAVDITTS DRDRSKYGML ARLAVEAGFD WVVYESKAHI
HCSVKAENSV AAKSGG

RELATED PRODUCTS:

- Active Sonic Hedgehog (SHH), human recombinant (Cat No. 4010-25, -100, -1000)
- Sonic Hedgehog (SHH), human recombinant (Cat No. 7883-25, -100, -1000)
- Sonic Hedgehog (SHH), murine recombinant (Cat No. 7884-25, -100, -1000)
- Human CellExp™ SHH, human recombinant (Cat No. 7223-10)

FOR RESEARCH USE ONLY! Not to be used on humans.