

## Recombinant Mouse Sonic Hedgehog (M-SHH)

<b>CATALOG #:</b>	4020-25	25 µg
	4020-100	100 µg
	4020-1000	1 mg
<b>LOT #:</b>	_____	
<b>SOURCE:</b>	<i>E. coli</i>	
<b>PURITY:</b>	> 97% by SDS-PAGE and HPLC analyses Endotoxin level is < 0.01 ng per µg rm-SHH	
<b>MOLECULAR WT:</b>	19.8 kDa	
<b>FORM:</b>	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 ED<sub>50</sub> in the range of 0.03 – 0.30 µg/ml.

**AMINO ACID SEQUENCE:**

MIIGPGRGFG KRRHPKKLTP LAYKQFIPNV AEKTLGASGR YEGKITRNSR RFKELTPNYN  
PDIIFKDEEN TGADRLMTQR CKDKLNALAI SVMNQWPGVK LRVTEGWDED GHHSEESLHY  
EGRAVDITTS DRDRSKYGML ARLAVEAGFD WYVESKAHI HCSVKAENSV AAKSGG

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

**RELATED PRODUCTS:**

## Apoptosis Detection Kits &amp; Reagents

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- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

## Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

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- Quick Cell Proliferation Assay Kit
- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
- LDH-Cytotoxicity Assay Kit
- Bioluminescence Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

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- HAT Colorimetric Assay Kit & Reagents
- DNA Damage Quantification Kit
- Glutathione & Nitric Oxide Fluorometric & Colorimetric Assay Kits

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- cAMP & cGMP Assay Kits
- Akt & JNK Activity Assay Kits
- Beta-Secretase Activity Assay Kit

## Adipocyte &amp; Lipid Transfer

- Recombinant Adiponectin, Survivin, & Leptin
- CETP Activity Assay & Drug Discovery Kits
- PLTP Activity Assay & Drug Discovery Kits
- Total Cholesterol Quantification Kit

## Molecular Biology &amp; Reporter Assays

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- Cloning Insert Quick Screening Kit
- Mitochondrial & Genomic DNA Isolation Kits
- 5 Minutes DNA Ligation Kit
- 20 Minutes Gel Staining/Destaining Kit
- β -Galactosidase Staining Kit & Luciferase Reporter Assay Kit

## Growth Factors and Cytokines

## Monoclonal and Polyclonal Antibodies