

## Recombinant Mouse Shh protein

**Cat. No.** Shh-1316M    **Lot. No.** (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Mouse Shh protein was expressed in Escherichia coli.
<b>Species</b>	Mouse
<b>Source</b>	E.coli
<b>ProteinLength</b>	176
<b>Description</b>	Sonic hedgehog is one of three proteins in the mammalian signaling pathway family called hedgehog, the others being desert hedgehog (DHH) and indian hedgehog (IHH). As the hh homologues, SHH has been found to have the most critical roles in development. It acts as a morphogen involved in patterning many systems, including the limb and midline structures in the brain, spinal cord, the thalamus by the zona limitans intrathalamica and the teeth. There SHH undergoes auto-processing to generate a 20 kDa (residues 24 - 197) N-terminal signaling domain (SHH-N) and a 25 kDa (residues 198-462) C-terminal domain with no known signaling role.
<b>Form</b>	Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4.
<b>Bio-activity</b>	Fully biologically active when compared to standard. The ED50 as determined by inducing alkaline phosphatase production of murine C3H10T1/2 cells is 0.5 - 1.0 µg/ml.
<b>Molecular Mass</b>	Approximately 19.8 kDa, a single non-glycosylated polypeptide chain containing 176 amino acids.

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>AA Sequence</b>	IVIGPGRGFGKRRHPKLTPLAYKQFIPNVAEKTGASGRYEGKITRNSERFKELTPN YNPDIIFKDEENTGADRLMTQRCKDKLNALAISVMNQWPGVKLRVTEGWDEDGHHS EESLHYEGRAVDITTSRDRRSKYGMLARLAVEAGFDWVYYESKAHIHCSVKAENSV AAKSGG
<b>Endotoxin</b>	Less than 1 EU/μg of rMuSHH as determined by LAL method.
<b>Purity</b>	>95% by SDS-PAGE and HPLC analysis.
<b>Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
<b>Reconstitution</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤-20 centigrade. Further dilutions should be made in appropriate buffered solutions.

## GENE INFORMATION

<b>Gene Name</b>	Shh
<b>Official Symbol</b>	Shh
<b>Synonyms</b>	SHH; sonic hedgehog; sonic hedgehog protein; HHG-1; short digits; hemimelic extra toes; Hx; Dsh; Hhg1; Hxl3; M100081; 9530036O11Rik;
<b>Gene ID</b>	20423

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

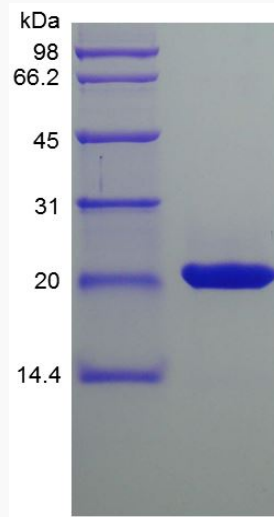
 45-1 Ramsey Road, Shirley, NY 11967, USA

mRNA Refseq [NM\\_009170](#)

Protein Refseq [NP\\_033196](#)

UniProt ID [Q62226](#)

SDS-PAGE of Shh-  
1316M



 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA