Shh
Recombinant Rat Sonic Hedgehog

Catalog No.	CRC403A-AF	**Quantity:**	25 µg
	CRC403B-AF		100 µg
	CRC403C-AF		1.0 mg

Alternate Names: Shh, HHG-1, HHG1, Sonic hedgehog protein

Description: Sonic hedgehog (SHH) 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 and all signal via the same receptors. Recombinant mouse SHH is a non-glycosylated protein, containing 176 amino acids.

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Gene ID: 29499

Protein Accession No: Q63673

Source: *E. coli*

Molecular Weight: 19.9 kDa

Formulation: Recombinant mouse SHH is lyophilized from 10 mM Na_2PO_4, pH 7.5.

Purity: ≥95% by reducing and non-reducing SDS-PAGE.

Endotoxin Level: ≤ 1 EU/µg, by kinetic LAL analysis.

Amino Acid Sequence: MIIGPGRGFG KRRHPKKLTP LAYKQFIPNV AEKTLGASGR YEGKITRNSE RFKELTPNYN PDIIFKDEEN TGADRLMTQR CKDKLNALAI SVMNQWPGVK LRVTEGWDED GHHSEESLHY EGRAVDITTS DRDRSKYGML ARLAVEAGFD WVYYESKAHI HCSVKAENSV AAKSGG

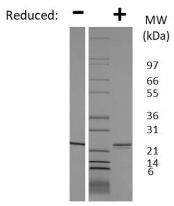
Reconstitution: **Centrifuge vial prior to opening.** When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/mL, which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

Storage & Stability: Lyophilized product is very stable at -20°C to -80°C for 1 year. Reconstituted material should be aliquoted and frozen at -20°C to -80°C. It is recommended that a carrier protein is added for long term storage. **Avoid repeated freeze-thaw cycles. Please note that the addition of any carrier protein into this product may produce unwanted endotoxin. This depends upon the particular application employed.**

Cell Sciences®
65 Parker Street
Unit 11
Newburyport, MA 01950

Toll Free: 888-769-1246
Phone: 978-572-1070
Fax: 978-992-0298

E-mail: info@cellsciences.com
Website: www.cellsciences.com



Rat SHH Gel
Figure: 1 ug run under (-) non-reducing conditions and (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Rat SHH is predicted to have a MW of 19.9 kDa.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

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