

DATA SHEET

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GFH168

Recombinant Human SHH

Description

Sonic hedgehog (SHH) is a member of a small group of hedgehog secreted proteins that are essential for development in both vertebrates and invertebrates. There are three mammalian hedgehog homologues, sonic, desert, and indian, that signal via the Patched-1 and Patched-2 receptors. SHH is a morphogen that is essential during vertebrate organogenesis and adult stem cell division.

Length179 aaMolecular Weight20.2 kDaSourceE. coliAccession NumberQ15465

Purity ≥95% determined by reducing and non-reducing SDS-PAGE

Specifications

Alternative Names Sonic hedgehog, HHG-1, HHG1, HLP3, HPE3

Biological Activity Human SHH is fully biologically active when compared to standard. The activity is determined by the dose-

dependent induction of alkaline prosphatase production by C3H/10T1/2 fibroblasts and it is typically 750

ng/ml.

Endotoxin Level ≤1.00 EU/µg as measured by kinetic LAL

Formulation Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium phosphate, pH 7.5

AA Sequence MIIGPGRGFG KRRHPKKLTP LAYKQFIPNV AEKTLGASGR YEGKISRNSE RFKELTPNYN

PDIIFKDEEN TGADRLMTQR CKDKLNALAI SVMNQWPGVK LRVTEGWDED GHHSEESLHY EGRALDITTS DRDRSKYGML ARLAVEAGFD WVYYESKAHI HCSVKAENSV AAKSGGCFP

Preparation and Storage

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 at 0.1 mg/ml, which can be further diluted into other aqueous solutions.

Stability and Storage 12 months from date of receipt when stored at -20°C to -80°C as supplied.

1 month when stored at 4°C after reconstituting as directed.

3 months when stored at -20°C to -80°C after reconstituting as directed.