

BACKGROUND:

Indian hedgehog (IHH) is an essential signaling factor that is secreted in the gut, cartilage, and bone during embryonic development. IHH acts through the patched (PTC) receptor to induce transcriptional changes important for bone and cartilage development. IHH also induces the expression of parathyroid hormone-related peptide (PTHrP), which in turn mediates IHH activity during chondrocyte differentiation, forming a negative feedback loop.

Recombinant human Indian hedgehog is a non-glycosylated protein monomer, containing 177 amino acids and having a molecular mass of 19.9 kDa.

Cat. No.:
RP1182AF

Alternate Names:
HHG-2

AA Sequence:

MIIGPGRVVG SRRRPPRKL VPLAYKQFSPN VPEKTLG
ASG RYEGKIARSS ERFKELTPNY NPDIIFKDEE NTGA
DRLMTQRCKDRLNSLA ISVMNQWPGV KLRVTEGWD
E DGHHSEESLH YEGRAVDITT SDRDRNKYGL LARLA
VEAGF DWVYYESKAH VHCSVKSEHSAAKTGG

TECHNICAL INFO

Source:
E. coli

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

Formulation:
0.1% Trifluoroacetic Acid (TFA)

Stability:
Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term 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 10 mM HCl at 0.1 mg/mL, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm.
- RP-HPLC calibrated against a known standard.
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:
Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Animal Component-Free
This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.

