

## 32-1356: IHH Recombinant Protein

**Alternative Name :** Indian hedgehog protein,IHH,HHG-2,BDA1.

### Description

Source : Escherichia Coli. IHH Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 176 amino acids and having a molecular mass of 19.8kDa. The IHH is purified by proprietary chromatographic techniques. IHH belongs to the hedgehog family of secreted signaling molecules. Hedgehog proteins are vital regulators of various developmental processes including growth, patterning and morphogenesis. The vertebrate homologues of Hh comprise several proteins including sonic hedgehog (Shh), Indian hedgehog (Ihh), and Desert hedgehog (Dhh). IHH has a specific role in bone growth and differentiation. In addition, IHH is involved in yolk sac vasculogenesis, having a central role in differentiation of epiblast cells into endothelial and red blood cells. IHH mRNA expression is detected in fetal lung, gut, stomach, liver, kidney, pancreas and strongly in cartilage in growth regions of the developing bone. IHH gene mutations cause the brachydactyly type A1 which is characterized by shortening or malformation of the phalanges and also the acrocapitofemoral dysplasia.

### Product Info

<b>Amount :</b>	25 µg
<b>Purification :</b>	Greater than 95.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
<b>Content :</b>	Lyophilized from a 0.2µm filtered concentrated solution in 1xPBS, pH 7.4.
<b>Storage condition :</b>	Lyophilized IHH although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IHH should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles.
<b>Amino Acid :</b>	IIGPGRVVGS RRRPPRKLVP LAYKQFSPNV PEKTLGASGR YEGKIARSSE RFKELTPNYN PDIIFKDEEN TGADRLMTQR CKDRLNSLAI SVMNQWPGVK LRVTEGWDED GHHSEESLHY EGRAVDITTS DRDRNKYGLL ARLAVEAGFD WVYYESKAHV HCSVKSEHSA AAKTGG.

### Application Note

It is recommended to reconstitute the lyophilized IHH in sterile 18M $\Omega$ -cm H<sub>2</sub>O not less than 100 $\Omega$ µg/ml, which can then be further diluted to other aqueous solutions. Determined by its ability to induce alkaline phosphatase production by C3H/10T1/2 (CCL-226) cells. The expected ED50 for this effect is 3.0-10.0 $\Omega$ µg/ml corresponding to a specific activity of 100-334units/mg.

