


Human Sonic Hedgehog Protein

Cat #: PRP1032

Size: 20µg/100µg/1mg

Product Information

	Product Name: Human Sonic Hedgehog Protein		
REF	Catalog Number: PRP1032	LOT	Lot Number: Refer to product label
	Purity: > 98 % as determined by SDS-PAGE		
	Storage: Store at -20°C		Preparation method: E. coli
	Shipping: The product is shipped at ambient temperature.		

Background: Sonic Hedgehog Homolog (SHH) belongs to a three-protein family called hedgehog. The other two family members are Indian Hedgehog (IHH) and Desert Hedgehog (DHH). Hedgehog proteins are key signaling molecules in embryonic development. SHH is expressed in various embryonic tissues and plays critical roles in regulating the patterning of many systems, such as limbs and brain. SHH also plays an important roles in the division of adult stem cells and the development of certain cancers and other diseases. SHH, DHH and IHH are structurally related, and share a high degree of amino acid sequence identity (e.g. SHH and IHH are 93% identity). The biologically active form of each HH molecule is obtained by autocatalytic cleavage of their precursor proteins, and each corresponds to approximately one half of the N-terminal portion of the precursor molecule. Although HH proteins have unique expression patterns and distinct biological roles within their respective regions of secretion, they use the same signaling pathway and can be substituted for one another in experimental systems. The recombinant E. coli-derived Human Sonic Hedgehog including an N-terminal Ile-Val-Ile sequence substituted for the naturally occurring, chemically modified, Cys residue.

Sequence: Amino acid sequence derived from Human SHH (Q15465.1) (Gly25-Gly197) was expressed.

Protein length: The recombinant Human SHH consists of 176 amino acids with 6×His tag at N terminus and predicts a molecular mass of 23.84 kDa.

Biological Activity: Testing in progress.

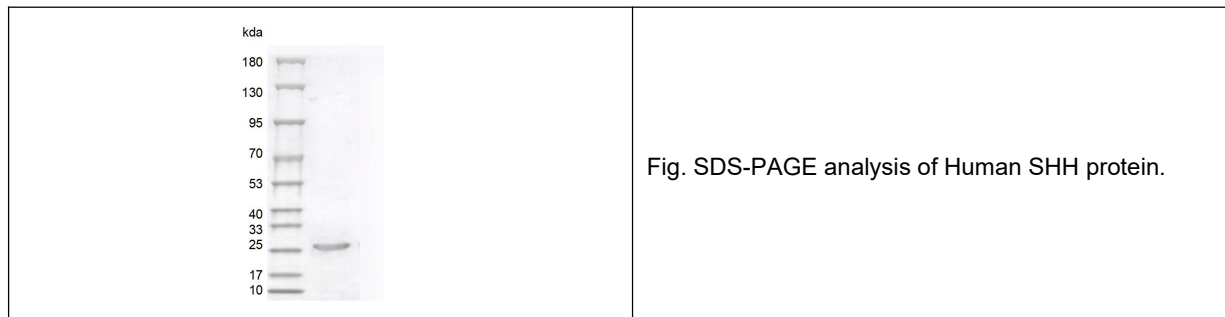
Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method.

Formulation: Lyophilized from PBS, pH 7.5.

Storage Instructions: Lyophilized recombinant Human SHH protein product should be stored desiccated below -20°C. Upon

reconstitution, the protein should be stored at 4°C between 2-7 days and for future use below -20°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Usage notes: Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized recombinant Human SHH protein using the buffer we provided not less than 100µg/ml, which can then be further diluted to other aqueous solutions.



Note: The product listed herein is for research use only and is not intended for use in human or clinical diagnosis. Suggested applications of our products are not recommendations to use our products in violation of any patent or as a license. We cannot be responsible for patent infringements or other violations that may occur with the use of this product.