

**Recombinant Human Sonic Hedgehog (Shh)**  
**Catalog # PBG10417****Specification**

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**Recombinant Human Sonic Hedgehog (Shh) - Product Information****Recombinant Human Sonic Hedgehog (Shh) - Additional Information****Description**

Members of the Hedgehog (Hh) family are highly conserved proteins which are widely represented throughout the animal kingdom. The three known mammalian Hh proteins, Sonic (Shh), Desert (Dhh) and Indian (Ihh) are structurally related and share a high degree of amino-acid sequence identity (e.g., Shh and Ihh are 93% identical). The biologically active form of Hh molecules is obtained by autocatalytic cleavage of their precursor proteins and corresponds to approximately the N-terminal one half 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 substitute for each other in experimental systems. Recombinant E. coli derived Human Sonic Hedgehog is a 20.0 kDa protein consisting of 176 amino acid residues, including an N-terminal Ile-Val-Ile sequence substituted for the natural occurring chemically modified Cys residue

**Biological Activity**

Determined by its ability to induce alkaline phosphatase production by C3H/10T1/2 (CCL-226) cells. The expected  $ED_{50}$  for this effect is 0.8-1.0  $\mu$ g/ml.

**Authenticity**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

**Endotoxin**

Endotoxin level is  $<0.1$  ng/  $\mu$ g of protein ( $<1$  EU/  $\mu$ g).

**Protein Content**

Verified by UV Spectroscopy and/or SDS-PAGE gel.

**Storage**

-20°C

**Precautions**

Recombinant Human Sonic Hedgehog (Shh) is for research use only and not for use in diagnostic or therapeutic procedures.

**Recombinant Human Sonic Hedgehog (Shh) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## **Recombinant Human Sonic Hedgehog (Shh) - Images**