

**Sonic Hedgehog, human recombinant (H-SHH)**  
**SHH; HHG1; HLP3; HPE3; SMMCI, Sonic hedgehog**  
**Catalog # PBV11449r****Specification**

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**Sonic Hedgehog, human recombinant (H-SHH) - Product info**

Primary Accession [Q15465](#)  
Calculated MW **19.7kDa KDa**

**Sonic Hedgehog, human recombinant (H-SHH) - Additional Info**

Gene ID **6469**  
**Other Names**  
SHH; HHG1; HLP3; HPE3; SMMCI, Sonic hedgehog  
  
Gene Source **Human**  
Source **E. coli**  
Assay&Purity **SDS-PAGE; ≥97%**  
Assay2&Purity2 **HPLC; ≥97%**  
Recombinant **Yes**  
**Target/Specificity**  
Human Sonic Hedgehog (H-SHH)

**Application Notes**

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 H<sub>2</sub>O to a concentration of 0.1-0.5 mg/ml, which can be further diluted into other aqueous solutions.

**Format**

Lyophilized protein

**Storage**

-20°C; Lyophilized from a 10 mM sodium phosphate buffer, pH 7.5.

**Sonic Hedgehog, human recombinant (H-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](#)

**Sonic Hedgehog, human recombinant (H-SHH) - Images**

**Sonic Hedgehog, human recombinant (H-SHH) - Background**

Human Sonic Hedgehog (SHH) is a highly conserved protein that plays an important role in embryonic development. It is expressed in neural tissue, the gut, and areas of limb development and promotes differentiation and growth in a tissue-specific manner. SHH is synthesized as a 45-kDa precursor protein, which is then cleaved to generate the active 19-kDa N-terminus. SHH interacts with the Patched and Smoothened transmembrane receptors, leading to the activation of GLI family transcription factors. Disruption of any part of this pathway during embryogenesis is associated with birth defects ranging from mild to severe. In adults, abnormal activation of the SHH pathway has been implicated in several forms of cancer. Three mammalian hedgehog genes (sonic, desert, Indian) share about 60% homology. The recombinant human SHH consists of 174 amino acids (aa24-197) of the native sequence of SHH with predicted molecular weight of 19.7 kD.