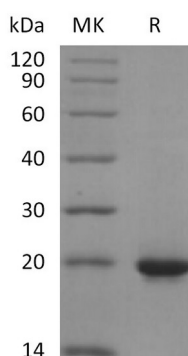


## Summary

<b>Name</b>	SHH/Sonic Hedgehog
<b>Purity</b>	Greater than 95% as determined by reducing SDS-PAGE
<b>Endotoxin level</b>	<1 EU/ $\mu$ g as determined by LAL test.
<b>Construction</b>	Recombinant Human Sonic Hedgehog is produced by our Mammalian expression system and the target gene encoding Cys24-Gly197 is expressed with a 6His tag at the C-terminus.
<b>Accession #</b>	Q15465
<b>Host</b>	Human Cells
<b>Species</b>	Human
<b>Predicted Molecular Mass</b>	20.4 KDa
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution of PBS, pH 7.4.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
<b>Stability&amp;Storage</b>	Lyophilized protein should be stored at $\leq -20^{\circ}\text{C}$ , stable for one year after receipt. Reconstituted protein solution can be stored at 2-8 $^{\circ}\text{C}$ for 2-7 days. Aliquots of reconstituted samples are stable at $\leq -20^{\circ}\text{C}$ for 3 months.
<b>Reconstitution</b>	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 $\mu$ g/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles. Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 $\mu$ g/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

## SDS-PAGE image



## Background

**Product Name: Recombinant Human SHH (C-6His)**  
**Catalog #: PHH2175**



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**Alternative Names**

Sonic Hedgehog Protein; SHH; HHG-1

**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 role in adult, including the division of adult stem cells and the development of certain cancers and other diseases. Human SHH is expressed as a 45kDa precursor, and undergoes a series of processing during secretion. After the removal of the signal peptide, a protease within the C-terminal domain catalyzes the cleavage of SHH into a 20 kDa N-terminal signaling domain (SHH-N) and a 25 kDa C-terminal domain (SHH-C). SHH-N has the "all signaling" capability. SHH-N binds to the 12 pass transmembrane protein Patched (Ptc) on cell surface, which releases the repression of the activity of Smoothed (Smo), a G-protein coupled receptor, by Ptc.

**Note**

For Research Use Only , Not for Diagnostic Use.