

Sonic Hedgehog (SHH), human recombinant protein
SHH; HHG1; HLP3; HPE3; SMMCI, Sonic hedgehog
Catalog # PBV10043r**Specification**

Sonic Hedgehog (SHH), human recombinant protein - Product info

Primary Accession [Q15465](#)
Calculated MW **19.697kDa KDa**

Sonic Hedgehog (SHH), human recombinant protein - Additional Info

Gene ID **6469**
Gene Symbol **SHH**
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**
Results **750ng/ml.**
Target/Specificity
Sonic Hedgehog (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 H₂O 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 (SHH), human recombinant protein - 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 (SHH), human recombinant protein - Images

Sonic Hedgehog (SHH), human recombinant protein - Background

Recombinant 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 Cys at position 25 has been substituted with Ile. Human SHH is a non-glycosylated polypeptide consisting of 175 amino acids with a molecular weight of 19,697 Da.

Sonic Hedgehog (SHH), human recombinant protein - References

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Pepinsky R.B., et al. J. Biol. Chem. 273:14037-14045(1998).