



[Go to Product page](#)

Datasheet for ABIN7319453
Sonic Hedgehog Protein (SHH)

Overview

Quantity:	50 µg
Target:	Sonic Hedgehog (SHH)
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active

Product Details

Purpose:	Recombinant Human Sonic Hedgehog/SHH Protein (C24II)(Active)
Sequence:	Cys24-Gly197(Cys24Ile-Ile)
Characteristics:	Recombinant Human Sonic Hedgehog is produced by our E.coli expression system and the target gene encoding Cys24-Gly197(Cys24Ile-Ile) is expressed.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.
Biological Activity Comment:	Immobilized Human SHH at 1µg/ml(100 µl/well) can bind Human BOC-His(Cat: PKSH032123).

Target Details

Target:	Sonic Hedgehog (SHH)
Alternative Name:	SHH (SHH Products)
Background:	Background: Sonic Hedgehog Homolog (SHH) belongs to a three-protein family called

Target Details

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 45 kDa 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.

Synonym: Sonic Hedgehog Protein, SHH, HHG-1, SHH

Molecular Weight: 19.8 kDa

UniProt: [Q15465](#)

Pathways: [Hedgehog Signaling](#), [Dopaminergic Neurogenesis](#), [Regulation of Muscle Cell Differentiation](#), [Tube Formation](#), [Skeletal Muscle Fiber Development](#)

Application Details

Comment: 20 kDa

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from a 0.2 µm filtered solution of 20 mM PB, 100 mM NaCl, 1 mM DTT, pH 7.5.

Storage: 4 °C, -20 °C, -80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.