

Datasheet for ABIN7455651

## Sonic Hedgehog Protein (SHH) (His tag)



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### 1 Image

#### Overview

Quantity:	50 µg
Target:	Sonic Hedgehog (SHH)
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Sonic Hedgehog protein is labelled with His tag.

#### Product Details

Purpose:	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.
Characteristics:	Extracellular Domain Protein
Purification:	Purified from cell culture supernatant by affinity chromatography
Purity:	Greater than 95 % as determined by reducing SDS-PAGE.

#### Target Details

Target:	Sonic Hedgehog (SHH)
Alternative Name:	SHH ( <a href="#">SHH Products</a> )
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

## Target Details

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 Smoothened (Smo), a G-protein coupled receptor, by Ptc.

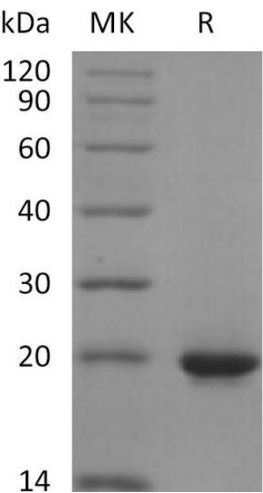
Molecular Weight:	20.4 KDa
UniProt:	<a href="#">Q15465</a>
Pathways:	<a href="#">Hedgehog Signaling</a> , <a href="#">Dopaminergic Neurogenesis</a> , <a href="#">Regulation of Muscle Cell Differentiation</a> , <a href="#">Tube Formation</a> , <a href="#">Skeletal Muscle Fiber Development</a>

## Application Details

Restrictions:	For Research Use only
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## Handling

Format:	Lyophilized
Buffer:	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
Storage:	-20 °C,-80 °C
Storage Comment:	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.
Expiry Date:	12 months



SDS-PAGE

**Image 1.** Greater than 95 % as determined by reducing SDS-PAGE.