

## Recombinant Human, Shh / Sonic Hedgehog (C24II), His-SUMO Tag, Animal Free & Carrier Free

Cat #: C-CYP388

Size: 5µg, 20µg, 100µg, 500µg, 1mg

Shipping: Blue Ice

### Product Overview

Sonic hedgehog protein (SHH) plays a critical role in development of embryonic morphogenesis which mediate the process of organogenesis and central nervous system. The sonic hedgehog signal pathway also plays an important role in cancerous tumors like embryonic cerebellar tumor, prostate cancer tumours and medulloblastoma. Shh binds the receptor (Ptc1) that induce the smo protein to activate the downstream pathway, which induce the shh target gene expression.

### Product Information

**Source:** *Escherichia Coli*.

**Purity:** >95% as determined by SDS-PAGE. Ni-NTA chromatography.

**Endotoxin:** <0.1EU per 1µg of the protein by the LAL method.

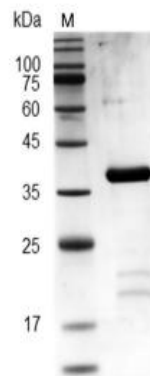
**Amino acid sequence:**

IIIGPGRGFGKRRHPKKLTPLAYKQFIPNVAEKTLGASGRYEGKISRNSERFKELTPNYNPDIIFKDEENTGADRLMTQRCKDKLNALAISVMN

QWPGVKLRVTEGWDEDGHSEESLHYEGRAVDITTSDRDSKYGMLARLAVEAGFDWVYYESKAHHCVKAENSVAAKSGG with

polyhistidine-SUMO tag at the N-terminus.

**Formulation:** Lyophilized from a sterile filtered aqueous solution in 1×PBS, pH 7.4.



SDS-PAGE analysis of recombinant human Sonic Hedgehog(C24II), His-SUMO Tag

## Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H<sub>2</sub>O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 µg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

## Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

## Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.