

Rev03  
Update: Dec,14,2021

**DATASHEET**

# Shh (C24IVI), Human

Cat. No.: Z03069

## Product Introduction

<b>Species</b>	Human
<b>Protein Construction</b>	Shh [Cys24-Gly197 (Cys24Ile-Val-Ile)] Accession # Q15465
<b>Purity</b>	> 95% as analyzed by SDS-PAGE
<b>Endotoxin Level</b>	< 0.2 EU/μg of protein by gel clotting method
<b>Biological Activity</b>	ED <sub>50</sub> < 2.0 μg/ml, measured by its ability to induce alkaline phosphatase production by C3H/10T1/2 (CCL-226) Cells, corresponding to a specific activity of > 500.0 units/mg.
<b>Expression System</b>	E. coli
<b>Apparent Molecular Weight</b>	~19.8 kDa, on SDS-PAGE under reducing conditions.
<b>Formulation</b>	Lyophilized after extensive dialysis against PBS.
<b>Reconstitution</b>	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH <sub>2</sub> O up to 100 μg/ml.
<b>Storage &amp; Stability</b>	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

## Background

**Target Background :** Sonic Hedgehog (Shh) is a member of the Hedgehog (Hh) family of highly conserved proteins which are widely represented throughout the animal kingdom. In mammal, there are three related Hh proteins, Sonic (Shh), Desert (Dhh) and Indian (Ihh). They share a high degree of amino-acid sequence identity (e.g., Shh and Ihh are 93% identical). Sonic Hedgehog plays a role in cell growth, cell specialization, and the normal shaping (patterning) of the body. Shh is also important for development of the brain and spinal cord (central nervous system), eyes, limbs, and many other parts of the body.

**Synonyms :** Hhg1; HHG-1; ShhNC; Sonic hedgehog protein N-product; Sonic hedgehog protein 19 kDa product

**For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.**

**GenScript USA, Inc.**

860 Centennial Ave. Piscataway, NJ 08854

Tel: 1-732-885-9188