

Datasheet for ABIN2018361

Sonic Hedgehog Protein (SHH) (AA 24-197, Cys24Ilelle-Mutant)[Go to Product page](#)**3** Images

Overview

Quantity:	50 µg
Target:	Sonic Hedgehog (SHH)
Protein Characteristics:	AA 24-197, Cys24Ilelle-Mutant
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active

Product Details

Characteristics:	ED50 < 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 units/mg.
Purity:	> 95 % by SDS-PAGE and HPLC analyses.
Endotoxin Level:	< 0.2 EU/µg, determined by LAL method.

Target Details

Target:	Sonic Hedgehog (SHH)
Abstract:	SHH Products
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

Target Details

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. Recombinant human Sonic Hedgehog (C24II) (rhShh) produced in E. coli is a single non-glycosylated polypeptide chain containing 175 amino acids. A fully biologically active molecule, rhShh has a molecular mass of 19.7 kDa analyzed by reducing SDS-PAGE.

Synonyms: Hhgl

Molecular Weight: 19.7 kDa, observed by reducing SDS-PAGE.

UniProt: [Q15465](#)

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

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

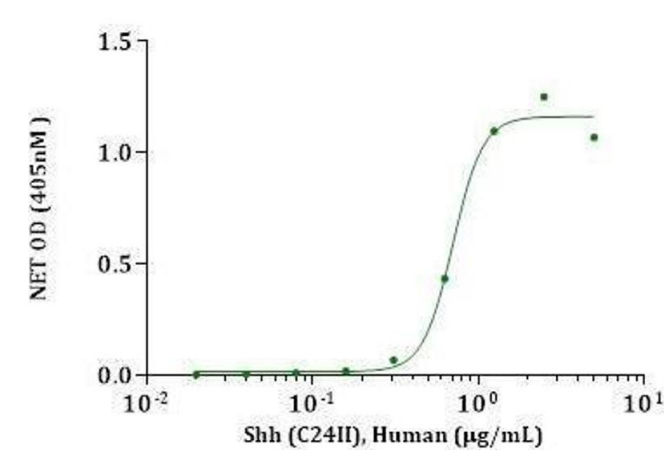
Reconstitution: Reconstituted in ddH₂O at 100 µg/mL.

Buffer: Lyophilized after extensive dialysis against PBS.

Storage: -80 °C

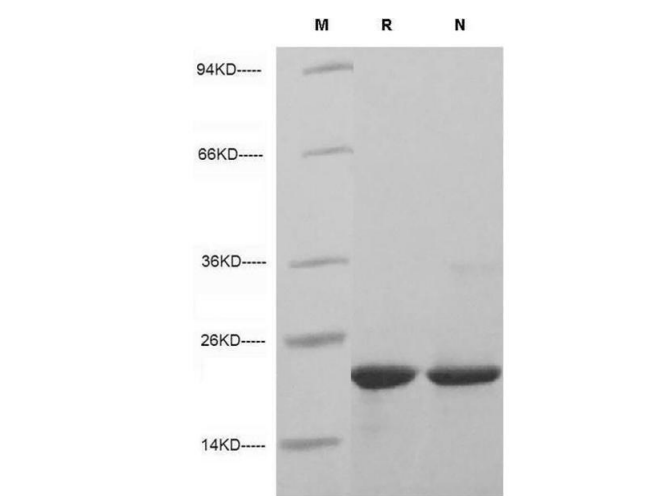
Storage Comment: Lyophilized recombinant human Sonic Hedgehog (C24II) (rhShh) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, rhShh should be stable up to 2 weeks at 4 °C or up to 3 months at -20 °C.

Expiry Date: 6 months



Activity Assay

Image 1. Shh (C24II), Human induced alkaline phosphatase production in CCL-226 cells. The ED50 for this effect is less than 2.0ug/mL (0.58 ug/mL)



SDS-PAGE

Image 2. 4 µg of SHH, Human was resolved with SDS-PAGE under reducing (R) and non-reducing (N) conditions and visualized by Coomassie Blue staining.

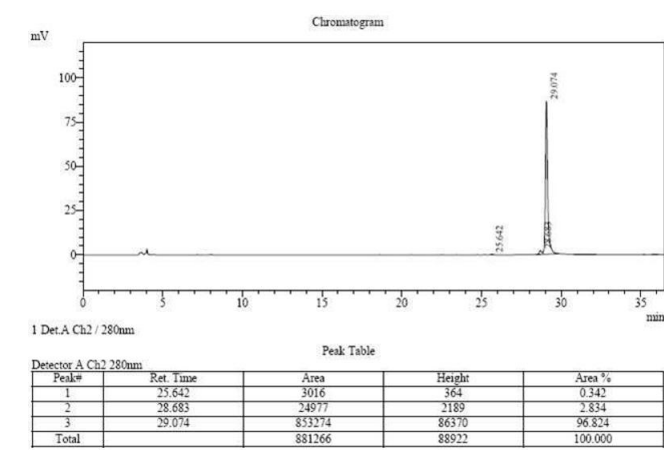


Image 3.