Active Hedgehog Homolog, Sonic (SHH)

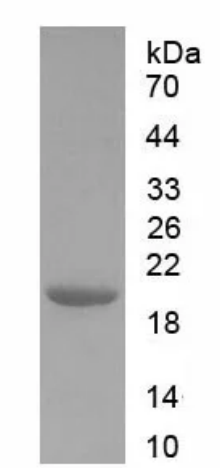
Catalog#:PHH12752

概述（Summary）

别称（Alternative Names）	HHG1; HLP3; HPE3; SMMCI; SHHN; SHH-N
纯度（Purity）	Greater than 97% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Pro36-Ala193】
Accession #	Q15465
表达宿主（Host）	293F
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	19.5 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	The C-terminal part of the sonic hedgehog protein precursor displays an autoproteolysis and a cholesterol transferase activity. Both activities result in the cleavage of the full-length protein into two parts (ShhN and ShhC) followed by the covalent attachment of a cholesterol moiety to the C-terminal of the newly generated ShhN. Both activities occur in the reticulum endoplasmic. Once cleaved, ShhC is degraded in the endoplasmic reticulum.; The dually lipidated sonic hedgehog protein N-product (ShhNp) is a morphogen which is essential for a variety of patterning events during development. Induces ventral cell fate in the neural tube and somites. Involved in the patterning of the anterior-posterior

axis of the developing limb bud. Essential for axon guidance. Binds to the patched (PTCH1) receptor, which functions in association with smoothened (SMO), to activate the transcription of target genes. In the absence of SHH, PTCH1 represses the constitutive signaling activity of SMO.

电泳图（SDS-PAGE image）



Greater than 97% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

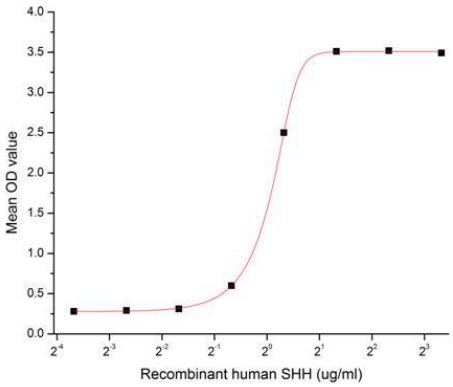


Figure1. Alkaline phosphatase levels in the cell supernatant of C3H10T1/2 induced by SHH

Sonic Hedgehog (Shh) is expressed in embryonic tissues that are critical for the patterning of the developing central nervous system, somite, and limb. It is also involved in whisker, hair, foregut, tooth, and bone development. Shh regulates neural and hematopoietic stem cell fate and is important for thymocyte differentiation and proliferation as well as T cell determination. In adult tissue Shh is associated with cancer development and tissue remodeling following injury. It has been reported that SHH can induce alkaline phosphatase production in C3H10T1/2 mouse embryonic fibroblast cells. To test the bioactivity of SHH, C3H10T1/2 cells were seeded into 24-well plate at a density of 1x105 cells/mL , and allowed to attach overnight before treated with certain concentrations of SHH for 24h and alkaline phosphatase levels in the cell supernatant were determined by ELISA. Alkaline phosphatase levels in the cell supernatant of C3H10T1/2 cells increased significantly after stimulated with SHH have shown in Figure1.

注意事项（Note）

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