Recombinant Mouse Sonic Hedgehog/SHH Protein (His Tag)



Catalog Number: PKSM040357

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Synonyms Sonic Hedgehog

Protein;SHH;HHG-1;SHH;9530036O11Rik;Dsh;Hhg1;Hx;Hxl3;M10008

Species Mouse

Expression Host HEK293 Cells
Sequence Met1-Gly198
Accession Q62226
Calculated Molecular Weight 21 kDa
Tag C-His

Bioactivity Measured by its ability to induce alkaline phosphatase production by C3H10T1/2

mouse embryonic fibroblast cells. The ED50 for this effect is typically 5-40 µg/mL.

Properties

Purity > 90 % as determined by reducing SDS-PAGE.

Endotoxin < 1.0 EU per µg of the protein as determined by the LAL method.

Storage Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to

-80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots

of reconstituted samples are stable at < -20°C for 3 months.

Shipping This product is provided as lyophilized powder which is shipped with ice packs.

Formulation Lyophilized from sterile PBS, pH 7.4

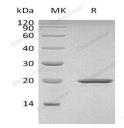
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as

protectants before lyophilization.

Please refer to the specific buffer information in the printed manual.

Reconstitution Please refer to the printed manual for detailed information.

Data



> 90 % as determined by reducing SDS-PAGE.

Background

Sonic HedgeHog, also known as sonic hedgehog protein, belongs to the hedgehog family. It cannot be detected in adult tissues while can be found in fetal intestine, liver, lung, and kidney. Sonic HedgeHog is a protein that is vital in guding the early embryo. It has been associated as the major inductive signal in patterning of the ventral neural tube, the anterior-posterior limb axis, and the ventral somites. Sonic HedgeHog intercellular signal is essential for a various patterning events during development: signal produced by the notochord that induces ventral cell fate in the neural tube and somites, and the polarizing signal for patterning of the anterior-posterior axis of the developing limb bud. Sonic HedgeHog binds

For Research Use Only

A Reliable Research Partner in Life Science and Medicine

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017

Web: www.elabscience.com Email: techsupport@elabscience.com

Recombinant Mouse Sonic Hedgehog/SHH Protein (His Tag)



Catalog Number: PKSM040357

to the patched receptor, which functions in association with smoothened, to activate the transcription of target genes. In the absence of sonic HedgeHog, patched receptor represses the constitutive signaling activity of smoothened. Sonic HedgeHog also regulates another factor, the gli oncogene. Defects in sonic hedgehog can cause microphthalmia isolated with coloboma type 5, triphalangeal thumb-polysyndactyly syndrome and holoprosencephaly type 3.

For Research Use Only

A Reliable Research Partner in Life Science and Medicine

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017

Web: <u>www.elabscience.com</u> Email: <u>techsupport@elabscience.com</u>