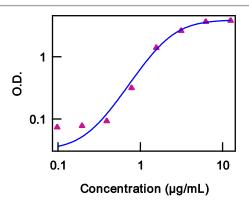


An Affymetrix Company

Mouse Sonic Hedgehog (SHH) Recombinant Protein

Catalog Number: 14-8671

RUO: For Research Use Only. Not for use in diagnostic procedures.



Induction of alkaline phosphatase in C3H/10T1/2 cells by Mouse SHH Recombinant Protein.

Product Information

Contents: Mouse Sonic Hedgehog (SHH)

Recombinant Protein
Catalog Number: 14-8671

Concentration: 0.1 mg/mL

Handling Conditions: For best recovery, quick-spin vial prior to opening. Use in sterile environment.

Source: E. coli expressed amino acids Gly26-Gly198 accession number NM_009170

Molecular Mass: 19.9 kDa

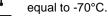
Purity: > 97%, as determined by SDS-PAGE. **Endotoxin:** Less than 0.01 ng/ug cytokine as

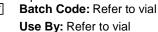
determined by the LAL assay.

Bioactivity: The ED50 of this protein, as measured by alkaline phosphatase induction in C3H/10T1/2 cells, is 0.5-3 ug/mL. This corresponds to a specific activity of 2 x 10e3 - 3.3 x 10e2 Units/mg.



Formulation: Sterile liquid; phosphate buffered saline with 1% BSA, pH 7.2. 0.22 um filtered. **Temperature Limitation:** Store at less than or







Description

Sonic Hedgehog (SHH) is a highly conserved protein that plays an important role in embryonic development. It is expressed in neural tissue, the gut, and areas of limb development and promotes differentiation and growth in a tissue-specific manner. SHH is synthesized as a 45-kDa precursor protein, which is then cleaved to generate the active 19-kDa N-terminus. SHH interacts with the Patched and Smoothened transmembrane receptors, leading to the activation of GLI family transcription factors. Disruption of any part of this pathway during embryogenesis is associated with birth defects ranging from mild to severe. In adults, abnormal activation of the SHH pathway has been implicated in several forms of cancer.

Applications Reported

Mouse Sonic Hedgehog Recombinant Protein is biologically active.

Applications Tested

The ED₅₀ of this protein, as measured by alkaline phosphatase induction in C3H/10T1/2 cells, is 0.5-3 μ g/ml. This corresponds to a specific activity of 2 x 10³ - 3.3 x 10² Units/mg.

References



Mouse Sonic Hedgehog (SHH) Recombinant Protein

Catalog Number: 14-8671

RUO: For Research Use Only. Not for use in diagnostic procedures.

Amankulor NM, Hambardzumvan D, Pvonteck SM, Becher OJ, Joyce JA, Holland EC. Sonic hedgehog pathway activation is induced by acute brain injury and regulated by injury-related inflammation. J Neurosci. 2009 Aug 19; 29(33): 10299-308

Villavicencio EH, Walterhouse DO, Iannaccone PM. The sonic hedgehog-patched-gli pathway in human development and disease. Am J Hum Genet. 2000 Nov; 67(5): 1047-54.

Related Products

14-8679 Human Sonic Hedgehog (SHH) Recombinant Protein