

Sonic Hedgehog Active Protein | SHH active protein

Sonic Hedgehog Protein, Human, Recombinant (aa 1-197, His Tag)

CATALOG #
AAA257878

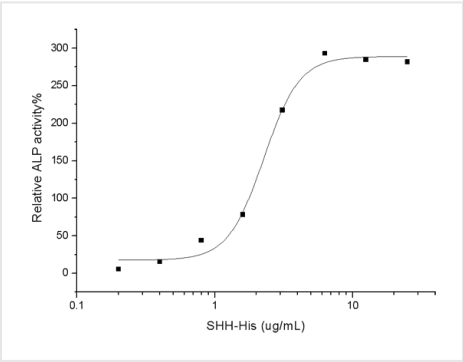
HOST
HEK293 Cells

PRODUCT SYNONYMS

Sonic Hedgehog; Sonic Hedgehog Protein; Human; Recombinant (aa 1-197; His Tag); Human SHH/Sonic hedgehog Protein (aa 1-197; HHG1 Protein; HLP3 Protein; HPE3 Protein; MCOPCB5 Protein; SMMCI Protein; Sonic hedgehog Protein; TPT Protein; TPTPS Protein; sonic hedgehog; SHH active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>95% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Met1-Gly19 7
Species	Human
Activity	Measured by its ability to induce alkaline phosphatase production by C3H10T1/2 mouse embryonic fibroblast cells. The ED50 for this effect is typically 2-10ug/mL.
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Cys 24
Tag	C-His
Protein Construction	A DNA sequence encoding the amino acid sequence (Met 1-Gly 197) of human SHH (Q15465), that is Sonic hedgehog protein N-product, was fused with a polyhistidine tag at the C-terminus.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.



SDS-PAGE

Application Data

Measured by its ability to induce alkaline phosphatase production by C3H10T1/2 mouse embryonic fibroblast cells. Nakamura, T. et al. (1997) Biochem. Biophys. Res. Commun.237:465. The ED50 for this effect is typically 2-10 ug/mL.

ADDITIONAL INFORMATION

Related Product Information for SHH active protein

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 guiding 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 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.

References

Ericson J, et al. (1997) Graded sonic hedgehog signaling and the specification of cell fate in the ventral neural tube. Cold Spring Harb Symp Quant Biol. 62:451-66.Marigo V, et al. (1996) Regulation of patched by sonic hedgehog in the developing neural tube. Proc Natl Acad Sci. 93(18):9346-51.Stone DM, et al. (1996) he tumour-suppressor gene patched encodes a candidate receptor for Sonic hedgehog. Nature. 384:129-34. Nakamura, T. et al. (1997) Biochem. Biophys. Res. Commun.237:465.

NCBI AND UNIPROT INFORMATION

NCBI GI #	6094283
NCBI GeneID	6469
UniProt Accession #	Q15465; Q75MC9; A4D247
Molecular Weight	462
NCBI Official Full Name	Sonic hedgehog protein
NCBI Official Synonym Full Names	sonic hedgehog
NCBI Official Symbol	SHH
NCBI Official Synonym Symbols	TPT; HHG1; HLP3; HPE3; SMMCI; TPTPS; MCOPCB5
NCBI Protein Information	sonic hedgehog protein; sonic hedgehog homolog
UniProt Protein Name	Sonic hedgehog protein
UniProt Gene Name	SHH
UniProt Synonym Gene Names	SHH

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/hek293-cells-shh-active-protein/sonic-hedgehog/257878>