Recombinant Human Sonic Hedgehog N-Terminus

Catalog No: #AP60459

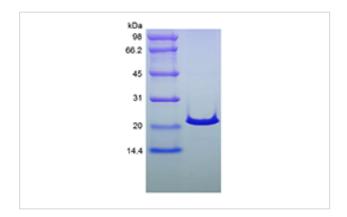


Package Size: #AP60459-1 5ug #AP60459-2 100ug #AP60459-3 500ug

Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

Description	
Product Name	Recombinant Human Sonic Hedgehog N-Terminus
Host Species	Escherichia coli.
Purification	> 98 % by SDS-PAGE and HPLC analyses.
Other Names	HHG-1
Uniprot	Q15465
GeneID	6469
Calculated MW	Approximately 19.8 kDa, a single non-glycosylated polypeptide chain containing 176 amino acids.
Target Sequence	IVIGPGRGFG KRRHPKKLTP LAYKQFIPNV AEKTLGASGR YEGKISRNSE RFKELTPNYN PDIIFKDEEN
	TGADRLMTQR CKDKLNALAI SVMNQWPGVK LRVTEGWDED GHHSEESLHY EGRAVDITTS
	DRDRSKYGML ARLAVEAGFD WVYYESKAHI HCSVKAENSV AAKSGG
Formulation	Lyophilized from a 0.2 μ m filtered concentrated solution in 20 mM PB, pH 7.4, 150 mM NaCl.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles 12 months from date of receipt, -20 to
	-70 °C as supplied 1 month, 2 to 8 °C under sterile conditions after reconstitution 3 months, -20 to -70 °C
	under sterile conditions after reconstitution.

Images



Background

Sonic Hedgehog (SHH) is one of three proteins of the Hedgehog (Hh) family, which also contains Desert Hedgehog (DHH) and Indian Hedgehog (IHH). The three members share a high degree of amino-acid sequence identity (e.g., SHH and IHH are 93 % identical). SHH is expressed in fetal intestine, liver, lung, and kidney, but not in adult tissues. The protein consists of 462 a.a. with a 23a.a. signal peptide at N-terminus, and is further cleaved into SHH N-Terminus and C-Terminus. SHH has the most critical roles in development, acting as a morphogen involved in patterning many systems, including the limb and midline structures in the brain, spinal cord, the thalamus by the zona limitans intrathalamica and the teeth. In the absence of Sonic HedgeHog, patched receptor represses the constitutive signaling activity of smoothened. SHH-N retains all known signaling capabilities, and can be lipid-modified without receptor affinity reducing, but has more potent than the unmodified form. The rHuSHH has an N-terminal lle-Val-lle sequence substituted for the natural occurring chemically modified Cys residue.

Note: This product is for in vitro research use only