

AR20002PU-S

Human Sonic hedgehog (SHH) - Purified

Alternate names:

HHG-1, Sonic hedgehog protein

Quantity:

5 µg

Background:

Members of the Hedgehog (Hh) family are highly conserved proteins which are widely represented throughout the animal kingdom. The three known mammalian Hh proteins, Sonic (Shh), Desert (Dhh) and Indian (Ihh) are structurally related and share a high degree of amino-acid sequence identity (e.g., Shh and Ihh are 93% identical). The biologically active form of Hh molecules is obtained by autocatalytic cleavage of their precursor proteins and corresponds to approximately the N-terminal one half of the precursor molecule. Although Hh proteins have unique expression patterns and distinct biological roles within their respective regions of secretion, they use the same signaling pathway and can substitute for each other in experimental systems.

Uniprot ID:

[Q15465](#)

NCBI:

[NP_000184](#)

GeneID:

[6469](#)

Species:

Human

Source:

E. coli

Format:

State: Lyophilized (0.2 µ sterile filtered) protein without additives

Purity: >98% pure by SDS-PAGE gel and HPLC analyses.

Endotoxin Level: < 0.1 ng per µg (1EU/µg)

Applications:

Recombinant E. coli derived Human Sonic HedgeHog is a 20.0 kDa protein consisting of 176 amino acid residues, including an N-terminal Ile-Val-Ile sequence substituted for the natural occurring chemically modified Cys residue.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Description:

AA Sequence:

IVIGPGRGFG KRRHPKKLTP LAYKQFIPNV AEKTLGASGR YEGKISRNS RFKELTPNYN
PDIIFKDEEN TGADRLMTQR CKDKLNALAI SVMNQWPGVK LRVTEGWDED GHHSSESLHY
EGRALDITTS DRDRSKYGML ARLAVEAGFD WYYESKAHI HCSVKAENSV AAKSGG

Biological Activity: Determined by its ability to induce alkaline phosphatase production by C3H/10T1/2 (CCL-226) cells.

The expected ED50 for this effect is 0.8-1.0 µg/ml.

Molecular weight: kDa

Storage:

Store the lyophilized protein at -20°C.

Following reconstitution product is stable for 3 months when stored in working aliquots with a carrier protein at -20°C.

Avoid repeated freezing and thawing.

Shelf life: One year from despatch.