Recombinant Mouse SHH(C25II)

Catalog No: CH66

Description	Recombinant Mouse Sonic Hedgehog is produced by our E.coli expression system and the target gene encoding Cys25-Gly198(Cys25Ile-Ile) is expressed.
Source	E. coli
Alternative name	Sonic Hedgehog Protein; SHH; HHG-1; SHH
Accession No.	Q62226
Formulation	Lyophilized from a 0.2 μm filtered solution of 20mM PB, 150mM NaCl, 1mM DTT, pH 7.4.
Quality Control	Purity: Greater than 90% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1 ng/μg (1 IEU/μg) as determined by LAL test.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Storage	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Amino Acid Sequence	MIIGPGRGFGKRRHPKKLTPLAYKQFIPNVAEKTLGASGRYEGKITRNSERFKELTPNYNPDIIFKDEENT GADRLMTQRCKDKLNALAISVMNQWPGVKLRVTEGWDEDGHHSEESLHYEGRAVDITTSDRDRSKYG MLARLAVEAGFDWVYYESKAHIHCSVKAEN SVAAKSGG
Background	Mouse Sonic Hedgehog Homolog (SHH) belongs to a three-protein family called Hedgehog. The other two family members are Indian Hedgehog (IHH) and Desert Hedgehog (DHH). Hedgehog proteins are key signaling molecules in embryonic development. SHH is expressed in various embryonic tissues and plays critical roles in regulating the patterning of many systems, such as limbs and brain. SHH also plays an important role in adult, including the division of adult stem cells and the development of certain cancers and other diseases.Mouse Shh is synthesized as a 437 aa precursor that contains a 24 aa signal sequence and a 413 aa mature region. The mature region is autocatalytically processed into a nonglycosylated, 20 kDa, 174 aa N•terminal fragment (Shh• N), and a catalytic•processing,glycosylated, 34 kDa, 239 aa C•terminal fragment. The 20 kDa Shh•N fragment is the core of the active hedgehog molecule. Mouse Shh•N is 99%, 98%, and 100% aa identical to human, rat and gerbil Shh•N, respectively.
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