

Recombinant Mouse SHH (C25II)

Catalog # EPT111

Expression Host E.coli

DESCRIPTION Recombinant Mouse Sonic Hedgehog is produced by

our E.coli expression system and the target gene

encoding Cys25-Gly198(Cys25Ile-Ile) is expressed.

Accession Q62226

Synonyms Sonic Hedgehog Protein; SHH; HHG-1; SHH

Mol Mass 19.8 KDa

AP Mol Mass 18-20 KDa, reducing conditions

Purity Greater than 95% as determined by reducing

SDS-PAGE.

Endotoxin Less than 0.001 ng/ μ g (0.01 EU/ μ g) as determined by

LAL test.

FORMULATION Lyophilized from a 0.2 µm filtered solution of 20mM

PB, 150mM NaCl, 1mM DTT, pH 7.4.

RECONSTITUTION Always centrifuge tubes before opening.Do not mix by

vortex or pipetting.

It is not recommended to reconstitute to a



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concentration less than 100µg/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

SHIPPING The

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.

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

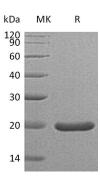
systems, such as limbs and brain. SHH also plays an

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.



SDS-PAGE

