Recombinant Mouse Sonic hedgehog protein N-product/SHH Protein



RPCB1075

Product Information

Product SKU: RPCB1075 **Gene ID**: 20423 **Size**: 10μg

Tag: C-His Reactivity: Mouse

Additional Information

Expression Host: HEK293 cells **Swissprot**: Q62226

Purity: > 97% by SDS-PAGE.

Protein Information

Background:

This protein is instrumental in patterning the early embryo. It has been implicated as the key inductive signal in patterning of the ventral neural tube, the anterior-posterior limb axis, and the ventral somites. Of three human proteins showing sequence and functional similarity to the sonic hedgehog protein of Drosophila, this protein is the most similar. The protein is made as a precursor that is autocatalytically cleaved; the N-terminal portion is soluble and contains the signalling activity while the C-terminal portion is involved in precursor processing. More importantly, the C-terminal product covalently attaches a cholesterol moiety to the N-terminal product, restricting the Nterminal product to the cell surface and preventing it from freely diffusing throughout the developing embryo. Defects in this protein or in its signalling pathway are a cause of holoprosencephaly (HPE), a disorder in which the developing forebrain fails to correctly separate into right and left hemispheres. HPE is manifested by facial deformities. It is also thought that mutations in this gene or in its signalling pathway may be responsible for VACTERL syndrome, which is characterized by vertebral defects, anal atresia, tracheoesophageal fistula with esophageal atresia, radial and renal dysplasia, cardiac anomalies, and limb abnormalities.

Protein Description:

High quality, high purity and low endotoxin recombinant Recombinant Mouse Sonic hedgehog protein N-product/SHH Protein, tested reactivity in HEK293 cells and has been validated in SDS-PAGE.100% guaranteed.

Endotoxin: <0.1EU/μg

Formulation: Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

Storage: Store at -20°C.Store the lyophilized protein at -20°C to -80 °C up to 1 year from the

date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 $\,$

months, at 2-8°C for up to 1 week.