

RPCB1828

Product Information

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| Product SKU: | RPCB1828 | Gene ID: | 50846 | Size: | 10µg |
| Tag: | N-6His | Reactivity: | Human | | |

Additional Information

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| Expression Host: | E. coli | Swissprot: | O43323 |
| Purity: | - | | |

Protein Information

Background: Desert Hedgehog (Dhh) belongs to the highly conserved Hedgehog family of proteins which are involved in multiple developmental processes. Desert Hedgehog is a secreted, 45 kDa, 373 amino acid (aa) protein that undergoes autocatalytic cleavage between Gly198 and Cys199 catalyzed by the C-terminal domain, which releases the N-terminal domain with a concomitant attachment of cholesterol at its new C-terminus. In addition to the C-terminally attached cholesterol, a fatty acid acyl chain is esterified to the N-terminal cysteine (aa 23) via an amide linkage. The 19 kDa N-terminal signaling domain is membrane associated due to its double lipid modifications. Its binding to Patched receptors results in the loss of Patched repression of Smoothened signaling (1 - 4). Dhh binds both Patched and Patched 2 as well as Hedgehog interacting protein (Hip) (5). Within the N-terminal domain, human Dhh shares 97% aa sequence identity with mouse and rat Dhh. It shares approximately 75% aa sequence identity with human Indian (Ihh) and Sonic Hedgehog (Shh) (5). Dhh is produced by Sertoli cells and is required for testis development and spermatogenesis (6, 7). It induces steroidogenic factor 1, which is instrumental in promoting Leydig cell differentiation (8, 9).

Protein Description: High quality, high purity and low endotoxin recombinant Recombinant Human HHG-3/DHH Protein , tested reactivity in E. coli and has been validated in SDS-PAGE. 100% guaranteed.

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| Endotoxin: | <1 EU/μg |
| Formulation: | Lyophilized from a 0.22 μm filtered solution of PBS, 1mM DTT, 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. |