

# Shh (C24IVI)

Catalog # PVGS1290

## Product Information

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| <b>Primary Accession Species</b> | <a href="#">Q15465</a><br>Human                                                                                                                                                                                                                                                                                          |
| <b>Sequence</b>                  | Cys24-Gly197 (Cys24Ile-Val-Ile)                                                                                                                                                                                                                                                                                          |
| <b>Purity</b>                    | > 95% as analyzed by SDS-PAGE                                                                                                                                                                                                                                                                                            |
| <b>Endotoxin Level</b>           |                                                                                                                                                                                                                                                                                                                          |
| <b>Expression System</b>         | E. coli                                                                                                                                                                                                                                                                                                                  |
| <b>Formulation</b>               | Lyophilized after extensive dialysis against PBS.                                                                                                                                                                                                                                                                        |
| <b>Reconstitution</b>            | It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH <sub>2</sub> O up to 100 µg/ml.                                                                                                                                 |
| <b>Storage &amp; Stability</b>   | Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles. |

## Additional Information

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| <b>Gene ID</b>           | 6469                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Other Names</b>       | Sonic hedgehog protein, SHH, 3.1.-., HHG-1, Shh unprocessed N-terminal signaling and C-terminal autoprocessing domains, ShhNC, Sonic hedgehog protein N-product, ShhN, Shh N-terminal processed signaling domains, ShhNp, SHH ( <a href="#">HGNC:10848</a> )                                                                                                                                                                                                                                                                                                                                                    |
| <b>Target Background</b> | Sonic Hedgehog (Shh) is a member of the Hedgehog (Hh) family of highly conserved proteins which are widely represented throughout the animal kingdom. In mammal, there are three related Hh proteins, Sonic (Shh), Desert (Dhh) and Indian (Ihh). They share a high degree of amino-acid sequence identity (e.g., Shh and Ihh are 93% identical). Sonic Hedgehog plays a role in cell growth, cell specialization, and the normal shaping (patterning) of the body. Shh is also important for development of the brain and spinal cord (central nervous system), eyes, limbs, and many other parts of the body. |

## Protein Information

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| <b>Name</b> | SHH ( <a href="#">HGNC:10848</a> ) |
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| <b>Function</b>          | [Sonic hedgehog protein]: The C-terminal part of the sonic hedgehog protein precursor displays an autoproteolysis and a cholesterol transferase activity (By similarity). Both activities result in the cleavage of the full-length protein into two parts (ShhN and ShhC) followed by the covalent attachment of a cholesterol moiety to the C-terminal of the newly generated ShhN (By similarity). Both activities occur in the endoplasmic reticulum (By similarity). Once cleaved, ShhC is degraded in the endoplasmic reticulum (By similarity). |
| <b>Cellular Location</b> | [Sonic hedgehog protein]: Endoplasmic reticulum membrane. Golgi apparatus membrane. Secreted Note=Co-localizes with HHAT in the ER and Golgi membrane                                                                                                                                                                                                                                                                                                                                                                                                  |

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