

## GFM55 Recombinant Mouse SHH

### Description

Sonic hedgehog (SHH) is a member of a small group of hedgehog secreted proteins that are essential for development in both vertebrates and invertebrates. There are three mammalian hedgehog homologues, sonic, desert, and indian, that signal via the Patched-1 and Patched-2 receptors. SHH is a morphogen that is essential during vertebrate organogenesis and adult stem cell division.

|                         |   |
|-------------------------|---|
| <b>Length</b>           | 175 aa  |
| <b>Molecular Weight</b> | 18.8 kDa  |
| <b>Source</b>           | E. coli   |
| <b>Accession Number</b> | P40225  |
| <b>Purity</b>           | ≥95% determined by reducing and non-reducing SDS-PAGE |

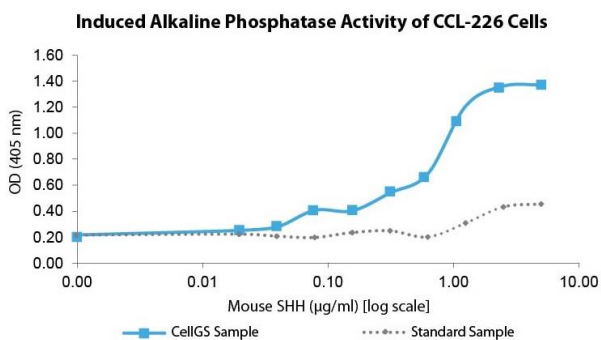
### Specifications

|                            |   |
|----------------------------|---|
| <b>Alternative Names</b>   | Sonic hedgehog, HHG-1, HHG1, HLP3, HPE3   |
| <b>Biological Activity</b> | Mouse SHH is fully biologically active when compared to standard. The activity is determined by the ability to induce alkaline phosphatase activity of CCL-226 cells.                                 |
| <b>Endotoxin Level</b>     | ≤1.00 EU/μg as measured by kinetic LAL  |
| <b>Formulation</b>         | Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium phosphate, pH 7.5   |
| <b>AA Sequence</b>         | MSPAPPACDL RVLKLLRDS HVLHSRLSQC PEVHPLPTPV LLPAVDFSLG EWKTQMEETK AQDILGAVTL<br>LLEGVMAARG QLGPTCLSSL LGQLSGQVRL LLGALQSLLG TQLPPQGRIT AHKDPNAIFL SFQHLLRGKV<br>RFLMLVGGST LCVRRAPPTT AVPSRTSLVL TLNEL |

### Preparation and Storage

|                              |   |
|------------------------------|---|
| <b>Reconstitution</b>        | Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/ml, which can be further diluted into other aqueous solutions. Upon reconstitution, a small amount of visible precipitate can be expected. A 10% overfill has been added to the total material vial to compensate for this loss. |
| <b>Stability and Storage</b> | 12 months from date of receipt when stored at -20°C to -80°C as supplied.<br>1 month when stored at 4°C after reconstituting as directed.<br>3 months when stored at -20°C to -80°C after reconstituting as directed.   |

### Data



Induced alkaline phosphatase activity of CCL-226 cells assay in the presence of 1 μM retinoic acid. Alkaline phosphatase was measured to calculate the ED50.