

Datasheet for 010-001-W24-0005**rMouse Sonic Hedgehog Protein****Overview**

Description:	Mouse Sonic Hedgehog Recombinant Protein - 010-001-W24-0005
Item No.:	010-001-W24-0005
Size:	5 µg
Applications:	Cellular Assay
Origin:	Mouse
Expressed in:	E. coli

Product Details

Background:	Sonic hedgehog (SHH) is a member of a small group of secreted proteins that are essential for development in both vertebrates and invertebrates. Three mammalian hedgehog genes (sonic, desert, Indian) share about 60% homology and all signal via the same receptors. Recombinant mouse SHH is a non-glycosylated protein, containing 176 amino acids, with a molecular weight of 19.8 kDa. The Cys at position 25 has been substituted with Ile.
Synonyms:	HHG-1
Species of Origin:	Mouse
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	Shh
Purity/Specificity:	Sonic Hedgehog purity was determined to be greater than 97% as determined by analysis by UV-Spectroscopy at 280nm and by reducing and non-reducing SDS-PAGE.
Relevant Links:	• UniProtKB - Q62226

Application Details

Suggested Applications:	Cellular Assay (Based on references)
Application Note:	Sonic Hedgehog Recombinant Protein has been tested by biological activity and is suitable as a control for polyclonal or monoclonal anti-Sonic Hedgehog in immunological assays.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Endotoxin Level: Measured by kinetic LAL analysis and is typically ≤ 1 EU/ μ g protein. Biologic Activity: The activity is measured by the dose-dependent induction of alkaline phosphatase production by C3H/10T1/2 (CCL-226) fibroblasts and is typically 0.6-3 μ g/mL.

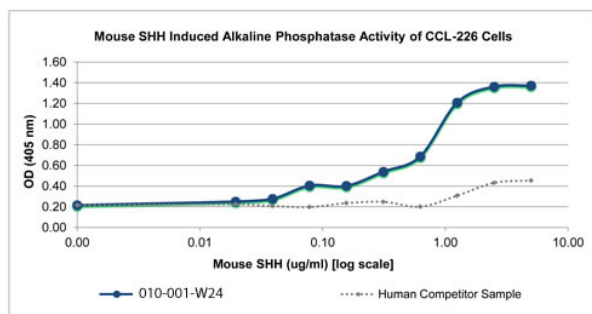
Formulation

Physical State:	Lyophilized
Buffer:	0.01 M Sodium Phosphate, pH 7.5
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	5 μ l (5-50 μ l)
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.
Expiration:	Expiration date is six (6) months from date of receipt.

Images



SDS-PAGE

Bioactivity of Mouse Sonic Hedgehog Recombinant Protein. Serial dilutions of Mouse SHH, starting at 5 ug/mL, were added to with CCL-226 cells in the presence of 1 uM Retinoic Acid. Alkaline phosphatase was measured and the linear portion of the curve was used to calculate the ED50. The ED50 of Mouse SHH is 0.48-0.72 ug/mL. This value is comparable to the typical expected range of human SHH is 0.8-1 ug/mL.

Disclaimer

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