Datasheet for ABIN6700558

Sonic Hedgehog Protein (SHH)

2 Images

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Overview

Quantity:	100 µg
Target:	Sonic Hedgehog (SHH)
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Application:	SDS-PAGE (SDS)

Product Details

Purpose:	Human Sonic Hedgehog Recombinant Protein
Purification:	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.
Purity:	97,00%
Endotoxin Level:	Measured by LAL is typically ≤ 1 EU/µg protein.
Biological Activity Comment:	The activity is measured by the dose-dependent induction of alkaline phosphatase production by C3H/10T1/2 (CCL-226) fibroblasts and is typically 0.8-1 µg/mL.

Target Details

Target:	Sonic Hedgehog (SHH)
Alternative Name:	SHH (SHH Products)
Background:	Synonyms: HHG-1 Background: Sonic hedgehog (SHH) is a member of a small group of secreted proteins that are

Target Details

	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 human SHH is a non-glycosylated protein, containing 175 amino acids, with a molecular weight of 19.7 kDa. The Cys at position 25 has been substituted with Ile.
UniProt:	Q15465
Pathways:	Hedgehog Signaling, Dopaminergic Neurogenesis, Regulation of Muscle Cell Differentiation, Tube Formation, Skeletal Muscle Fiber Development

Application Details

Application Notes:	Other: User Optimized Application_Note: Sonic Hedgehog Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Sonic Hedgehog in immunological assays.
Comment:	Suggested_Applications: Cellular Assay Other_Performance_Data:
Restrictions:	For Research Use only

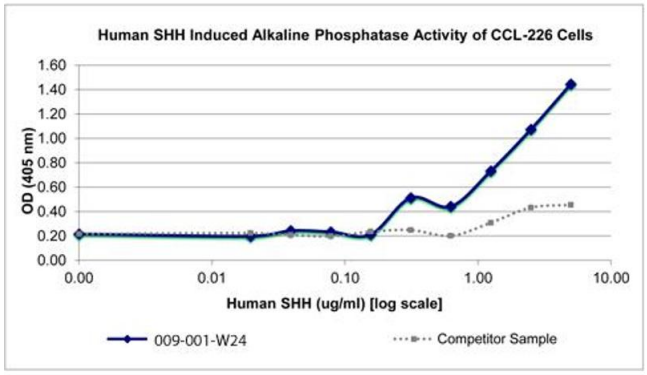
Handling

Format:	Lyophilized
Reconstitution:	Reconstitution_Buffer: Restore with deionized water (or equivalent) Reconstitution_Volume: 100 µL
Buffer:	Buffer: 0.01 M Sodium Phosphate, pH 7.5 Stabilizer: None
Preservative:	Without preservative
Storage:	4 °C,-20 °C
Storage Comment:	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.

Handling

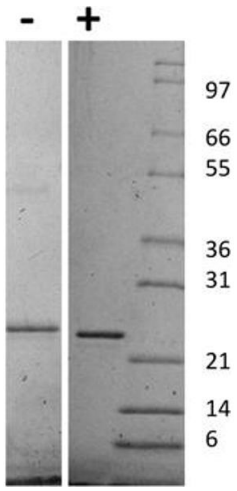
Expiry Date:	6 months

Images



SDS-PAGE

Image 1. SDS-PAGE of Human Sonic Hedgehog Recombinant Protein Bioactivity of Human Sonic Hedgehog Recombinant Protein. Serial dilutions of Human 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 us used to calculate the ED50. The ED50 of Human SHH is 1.2-1.8 ug/mL. The typical expected range is 0.8-1 ug/mL.



SDS-PAGE

Image 2. SDS-PAGE of Human Sonic Hedgehog Recombinant Protein SDS-PAGE of Human Sonic Hedgehog Recombinant Protein. Lane 1: 1 µg Human SHH in non-reducing conditions . Lane 2: 1 µg Human SHH in reducing conditions (+). Lane 3: Molecular weight marker. Human SHH has a predicted MW of 19.7 kDa.