

Datasheet for ABIN6699919
Growth Hormone 1 Protein (GH1)



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2 Images

Overview

Quantity:	100 µg
Target:	Growth Hormone 1 (GH1)
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Application:	SDS-PAGE (SDS)

Product Details

Purpose:	Human Growth Hormone Recombinant Protein
Purification:	Growth Hormone purity was determined to be greater than 98% as determined by analysis by UV-Spectroscopy at 280nm and by reducing and non-reducing SDS-pAGE.
Purity:	98,00%
Endotoxin Level:	Measured by LAL is typically ≤ 1 EU/µg protein.
Biological Activity Comment:	The activity is determined by the ability to induce proliferation of PDF 9D11 cells for this effect and is typically 0.5-0.8 ng/mL.

Target Details

Target:	Growth Hormone 1 (GH1)
Alternative Name:	GH1 (GH1 Products)
Background:	Synonyms: Growth hormone (GH), Pituitary growth hormone, Somatotropin Background: Growth Hormone (GH) is an important growth factor made in and secreted

Target Details

throughout the body by the anterior pituitary gland. It stimulates growth and cell reproduction and regeneration in humans and other animals. The inability to appropriately produce or respond to GH results in diseases of decreased stature in children and adults. Although GH is used to treat several growth disorders, it is thought to be a very complex hormone with many of its functions yet to be uncovered. Recombinant human GH is non-glycosylated protein, containing 192 amino acids, with a molecular weight of 22.2 kDa.

UniProt: [P01241](#)

Pathways: [NF-kappaB Signaling](#), [JAK-STAT Signaling](#), [Intracellular Steroid Hormone Receptor Signaling Pathway](#), [Peptide Hormone Metabolism](#), [Regulation of Intracellular Steroid Hormone Receptor Signaling](#), [Regulation of Hormone Metabolic Process](#), [Response to Growth Hormone Stimulus](#), [Regulation of Hormone Biosynthetic Process](#)

Application Details

Application Notes: Other: User Optimized
Application_Note: Growth Hormone Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Growth Hormone 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

Concentration: 0.1 mg/mL

Buffer: Buffer: 20 mM Sodium Bicarbonate, pH 8.0

Preservative: Without preservative

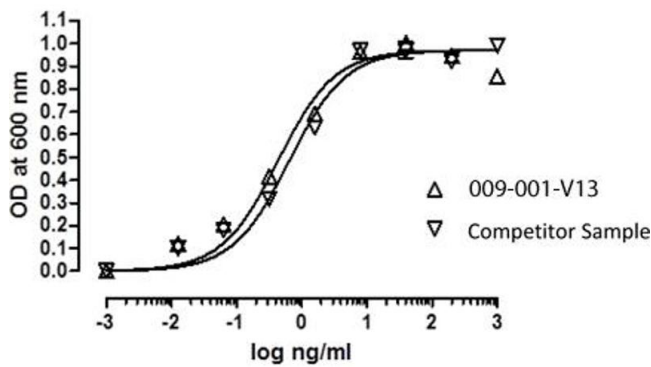
Storage: -20 °C

Storage Comment: Store vial at -20° 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.

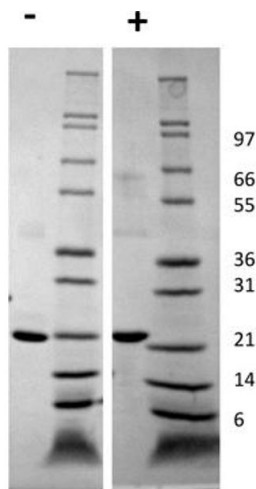
Expiry Date: 6 months

Images



SDS-PAGE

Image 1. SDS-PAGE of Human Growth Hormone Recombinant Protein Bioactivity of Human Growth Hormone Recombinant Protein. Serial dilutions of Human GH, starting at 3 ng/mL, were added to PDF 9D11 cells. Proliferation was measured and the linear portion of the curve was used to calculate the EC50. The ED50 of Human GH is 0.33-0.57 ng/mL. This value is comparable to the typical expected range of 0.5-0.8 ng/mL.



SDS-PAGE

Image 2. SDS-PAGE of Human Growth Hormone Recombinant Protein SDS-PAGE of Human Growth Hormone Recombinant Protein. Lane 1: 1 µg Human GH in non-reducing conditions. Lane 2: Molecular weight marker. Lane 3: 1 µg Human GH in reducing conditions (+). Lane 4: Molecular weight marker. Human GH is predicted have a MW of 22.2 kDa.