

Bioactive

GH1 (Human) Recombinant Protein

Catalog # P8715

Size 2 x 10 ug

Specification

Product Description	Human GH1 recombinant protein with His tag in N-terminus expressed in Nicotiana benthamiana plant.
Sequence	HHHHHHFPTIPLSRPFDNAMLRAHRLHQLAFDTYQEFEEAYIPKEQKYSFLQNPQTSLCFSES IPTP SNREETQQKSNLELLRISLLLIQSWLEPVQFLRSVFANSLVYGASDSNVYDLLKDLEEGIQ TLMGRL EDGSPRTGQIFKQTYSKFD TNSHNDDALLKNYGLLYCFRKDMDKVETFLRMVQCRSVEGSCGFAG
Theoretical MW (kDa)	22.9
Form	Lyophilized
Preparation Method	Nicotiana benthamiana plant expression system
Purity	> 97% as determined by SDS-PAGE.
Activity	ED ₅₀ < 0.04-0.1 ng/mL, measured by cell proliferation using Nb2-11 cells.
Storage Buffer	Protein (1 mg/mL) was lyophilized from a solution containing 0.05M PBS, pH7.5. Reconstitute the lyophilized powder in ddH ₂ O to 100 ug/mL.
Storage Instruction	Lyophilized protein at room temperature for 3 weeks, should be stored at -20°C. Protein aliquots at 4 °C for 2-7 days and should be stored at -20°C to -80°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid repeated freeze/thaw cycles.

Applications

- Functional Study

Gene Info — GH1

Entrez GeneID

[2688](#)

Protein Accession#	P01241
Gene Name	GH1
Gene Alias	GH, GH-N, GHN, hGH-N
Gene Description	growth hormone 1
Omim ID	139250 173100 262400 262650 604271
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a member of the somatotropin/prolactin family of hormones which play an important role in growth control. The gene, along with four other related genes, is located at the growth hormone locus on chromosome 17 where they are interspersed in the same transcriptional orientation; an arrangement which is thought to have evolved by a series of gene duplications. The five genes share a remarkably high degree of sequence identity. Alternative splicing generates additional isoforms of each of the five growth hormones, leading to further diversity and potential for specialization. This particular family member is expressed in the pituitary but not in placental tissue as is the case for the other four genes in the growth hormone locus. Mutations in or deletions of the gene lead to growth hormone deficiency and short stature. [provided by RefSeq]
Other Designations	pituitary growth hormone

Pathway

- [Cytokine-cytokine receptor interaction](#)
- [Jak-STAT signaling pathway](#)
- [Neuroactive ligand-receptor interaction](#)

Disease

- [Adenocarcinoma](#)
- [Adenoma](#)
- [Alzheimer disease](#)
- [Birth Weight](#)
- [Brain Ischemia](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)

- [Cardiovascular Diseases](#)
- [Cerebrovascular Accident](#)
- [Colonic Polyps](#)
- [Colorectal Neoplasms](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Dwarfism](#)
- [Edema](#)
- [Esophageal Neoplasms](#)
- [Esophagitis](#)
- [Genetic Predisposition to Disease](#)
- [Growth Disorders](#)
- [Hematologic Diseases](#)
- [Hyperplasia](#)
- [Hypertension](#)
- [Kidney Failure](#)
- [Lymphoma](#)
- [Metabolic Syndrome X](#)
- [Metaplasia](#)
- [Neoplasms](#)
- [Obesity](#)
- [Occupational Diseases](#)
- [Osteoporosis](#)
- [Ovarian Failure](#)
- [Polycystic Ovary Syndrome](#)
- [Puberty](#)

- [Schizophrenia](#)
- [Scoliosis](#)
- [Stroke](#)
- [Testicular Neoplasms](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)