

# Recombinant Rat Growth Hormone 1

**Cat. No.** Gh1-372R    **Lot. No.** (See product label)

## SPECIFICATION

<b>Product Overview</b>	Recombinant Rat Gh1 produced in E. coli is a single, non-glycosylated, polypeptide chain containing 190 amino acids and having a MW 21.81 kDa.
<b>Species</b>	Rat
<b>Source</b>	E.coli
<b>Description</b>	A polypeptide that is secreted by the adenohypophysis. Gh1, also known as somatotropin, stimulates mitosis, cell differentiation and cell growth. Species-specific Gh1 have been synthesized. GH1 augments the cytolytic activity of T-cells, antibody synthesis, and granulocyte differentiation induced by GM-CSF. GH1 also enhances production of TNF-alpha, generation of superoxide anions from peritoneal macrophages, and natural killer activity.
<b>Form</b>	Rat Gh1 (1 mg/ml) was lyophilized after extensive dialyses against 5 mM phosphate buffer + 5 mg mannitol + 1 mg glycine.
<b>Purity</b>	Greater than 97.0% as determined by analysis by RP-HPLC and by analysis by SDS-PAGE.
<b>Reconstitution</b>	It is recommended to reconstitute the lyophilized Gh1 Rat in sterile 18MΩ-cm H <sub>2</sub> O not less than 100 ug/ml, which can then be further diluted to other aqueous solutions.
<b>Amino Acid Sequence</b>	The sequence of the first five N-terminal amino acids is Met-Phe-Pro-Thr-Ile.

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

**Storage** Lyophilized Growth Hormone Rat although stable at room temperature for 3 weeks, should be stored desiccated below -20°C. Upon reconstitution Gh1 Rat should be stored at 2-4°C between 2-7 days and for future use below -20°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please avoid freeze-thaw cycles.

**Official Symbol** Gh1

## GENE INFORMATION

**Gene Name** Gh1 growth hormone 1 [ *Rattus norvegicus* ]

**Synonyms** Gh1; growth hormone 1; Gh; RNGHGP; somatotropin

**Gene ID** 24391

**mRNA Refseq** NM\_001034848

**Protein Refseq** NP\_001030020

**UniProt ID** P01244

**Chromosome Location** 10q32

**Pathway** Adipogenesis; Diabetes pathways; Jak-STAT signaling pathway; Neuroactive ligand-receptor interaction; Synthesis, Secretion, and Deacylation of Ghrelin

**Function** growth factor activity; growth hormone receptor binding; hormone activity; metal ion binding; prolactin receptor binding

**Growth hormone.**

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA