

Gh1

Recombinant Rat Growth Hormone

Catalog No.	GHCU100	Quantity:	100 µg
	GHCM001		1.0 mg
	GHCM005		5.0 mg

Alternate Names: GH, met-rGH, Somatotrophin

Description: Growth hormone (GH) is a single-chain polypeptide hormone which is synthesized, stored and secreted by the somatotroph cells of the anterior pituitary gland. It stimulates growth, cell division and regeneration and controls metabolism both directly and through the generation of IGF-I. For example, GH acts by interacting with specific receptors on the cell surface where it activates the MAPK/ERK pathway and directly stimulates division and multiplication of chondrocytes. GH also activates the JAK-STAT signalling pathway and the production of IGF-I. The liver is a major target organ and along with adipocytes, is the principal site of IGF-I production which mediates some of the effects of GH.

Methionyl growth hormone is identical to the pituitary hormone in all aspects. Recombinant expression in *E. coli* is unable to remove the N-terminal methionine residue to start instruction for translation.

UniProt ID: P01244

Gene ID: 24391

Molecular Weight: 21.94 kDa (191 aa)

Source: Expressed in *E. coli*

Formulation: Lyophilized from sterile-filtered 10 mM sodium phosphate, pH 8.8, containing met-rGH: mannitol:glycine (1:5:1 w/w)

Purity: 97%, monomer, as determined by gel filtration chromatography (SEC)

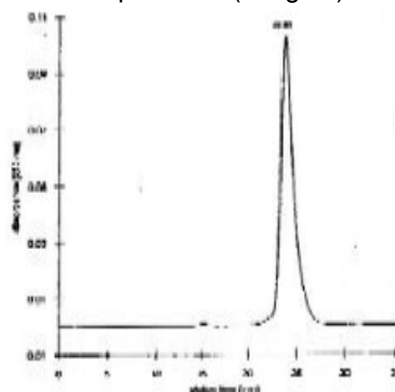
Endotoxin Level: < 0.1 EU/µg

Reconstitution: See Protocol for Handling of Growth Hormones (included).

Storage & Stability: Lyophilized protein is stable as supplied for 1 year at 2-8°C.



Size Exclusion Chromatography
Superose 12 HR 10/30
50 mM borate, pH 9.1; 0.5 ml/min
100 μ l rat GH (1 mg/ml)



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