

# Recombinant Human Growth Hormone

Catalog # FL158

## Product Specifications

Appearance	Sterile filtered White lyophilized (freeze-dried) powder.
Purity	> 97% by SDS-PAGE or HPLC.
Endotoxin	< 0.01 EU/μg of rHuGH protein as determined by LAL method.
Expression System	Expressed in E. coli.
Species	Human
Tag	Tag free.
Activity	Fully biologically active when compared to standard. The ED50 as determined by a cell proliferation assay using rat Nb2-11 lymphoma cells is less than 0.1 ng/ml, corresponding to a specific activity of $\geq 1.0 \times 10^7$ IU/mg.
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in PBS, with 0.02% (v/v) Tween-20, pH 7.4.
Reconstitution	Before use this product, please read the direction below carefully. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at $\leq -20^\circ\text{C}$ . Further dilutions should be made in appropriate buffered solutions.
Accession #	P01241 Phe27-Phe217
Amino acid sequence	FPTIPLSRLFDNAMLRAHRLHQLAFDITYQEFEEAYIPKEQKYSFLQNPQTSLCFSESIPTSPNREETQQKSNLELLRISLLLIQS WLEPVQFLRSVVFANSLVYGASDSNVYDLLKDLLEGIQTLMGRLDGSPTGQIFKQTYSKFDTNSHNDDALLKNYGLLYCF RKDMDKVETFLRIVQCRSVEGSCGF
Molecular weight	Approximately 22.0 kDa, a single non-glycosylated polypeptide chain containing 191 amino acids.
Synonyms	Somatotropin
Stability & Storage	Shipped on wet ice. For long term storage, the product should be stored $\leq -20^\circ\text{C}$ . Please avoid repeated freeze-thaw cycles after reconstitution. 36 months from date of receipt, $-20$ to $-70^\circ\text{C}$ as supplied. 1 month, $2$ to $8^\circ\text{C}$ under sterile conditions after reconstitution. 3 months, $-20$ to $-70^\circ\text{C}$ under sterile conditions after reconstitution.
Precautions	Recombinant Human Growth Hormone is for research use only and not for use in diagnostic or therapeutic procedures.

## Background

Growth hormone (GH), also known as somatotropin, is a member of a family of growth factors that includes prolactin, placental lactogens, proliferins, and somatolactin. It is a peptide hormone that stimulates growth, cell reproduction and regeneration in humans and other animals. The pulsatile release of GH into circulation is regulated by the concerted actions of the hypothalamic hormones-GH-releasing hormone and somatostatin as well as by signals from the periphery-ghrelin and leptin. Recombinant Human Growth hormone is a 22.0kDa globular protein containing 191 amino acid.

