

GH1

Recombinant Human Growth Hormone

Catalog No.	CRH308A	Quantity:	100 µg
	CRH308B		1 mg
	CRH308C		10 mg

Alternate Names: GH, Growth Hormone 1, Somatotropin

Description: Growth hormone (GH) is an important mitogenic growth factor that is synthesized, stored, and secreted by somatotropic cells of the anterior pituitary gland. GH stimulates growth, cell reproduction, and cell regeneration. In children, GH deficiencies can cause short stature, growth failure, and delayed sexual maturity. Adult GH deficiency presents with reduced lean body mass, increased adiposity, reduced muscle strength, and ultimately premature mortality. GH replacement therapy is used to treat many growth disorders, including Turner syndrome, chronic renal failure, and Prader–Willi syndrome.

Gene ID: 2688

UniProt ID: P01241

Source: *E. coli*

Molecular Weight: Monomer, 22.3 kDa (192 aa)

Formulation: Lyophilized from a sterile-filtered solution containing 20 mM sodium bicarbonate, pH 8.5

Purity: ≥95% by reducing and non-reducing SDS-PAGE

Endotoxin Level: ≤1 EU/µg by kinetic LAL analysis

Biological Activity: ED₅₀ = 1-15 ng/ml, determined by the ability to induce proliferation of PDF 9D11 cells.

Amino Acid Sequence: MFPTIPLSRL FDNAMLRAHR LHQLAFDTYQ EFEEAYIPKE QKYSFLQNPQ
TSLCFSESIP TPSNREETQQ KSNLELLRIS LLLIQSWLEP VQFLRSVFAN
SLVYGASDSN VYDLLKDL EE GIQTL MGRLE DGSPRTGQIF KQTYSKFDTN
SHNDDALLKN YGLLYCFRKD MDKVETFLRI VQCRSVEGSC GF

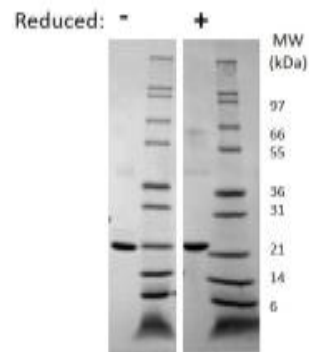
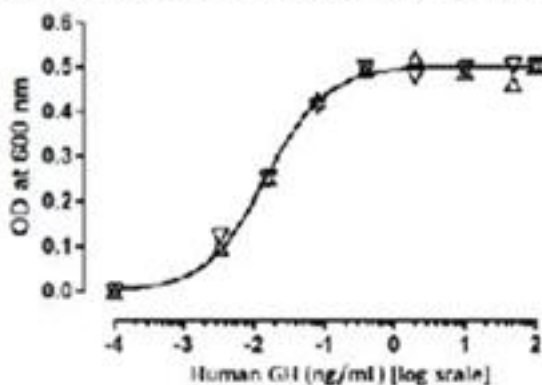
Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipet the solution up and down the sides of vial. **DO NOT VORTEX.** Allow several minutes for reconstitution. A small amount of precipitate may be seen.

Storage & Stability:

Store as supplied at -20°C to -80°C for up to 1 year. Upon reconstitution, prepare working aliquots and store at -20°C to -80°C. It is recommended that a carrier protein such as 0.1% HSA or BSA is added for long term storage.

Avoid repeated freeze-thaw cycles.

Human GH Induced Proliferation of 9D11 Cells



Human Growth Hormone Gel

Figure: 1 ug in each lane (-) non-reducing conditions and (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Human GH is predicted have a MW of 22.3 kDa.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.



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