

#34117 Store at -20C

Human Growth Hormone Recombinant Protein

100 µg



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MW (kDa):	UniProt ID:	Entrez-Gene Id:
22.3	#P01241	2688

Background

Growth hormone (GH) is a key growth factor secreted by the anterior pituitary gland that binds to the growth hormone receptor (GHR), which is present in many cell types, to exert its biological effects (1,2). GH primarily acts on the liver to stimulate the production and release of IGF-1 which targets metabolism, growth, and differentiation of cartilage, muscle, and bone (2,3). GH can act on differing cell types, muscle, and other tissues to promote lipolysis and increase protein synthesis, calcium retention, and amino acid uptake (4-6). GH deficiencies in children can result in growth failure, short stature, and delayed sexual maturity (7).

Endotoxin

Endotoxin levels are less than or equal to 1 EU / 1 µg hGH.

Purity

A greater than or equal to 95% purity was determined by SDS-PAGE.

Source / Purification

Recombinant human Growth Hormone was expressed in *E. coli* and is supplied in a lyophilized form.

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Background References

1. Goffin, V. et al. (1996) *Endocr Rev* 17, 385-410.
2. Le Roith, D. et al. (2001) *Endocr Rev* 22, 53-74.
3. Doessing, S. et al. (2010) *J Physiol* 588, 341-51.
4. Ahmad, A.M. et al. (2003) *J Clin Endocrinol Metab* 88, 2860-8.
5. Caputo, M. et al. (2021) *Cells* 10, 1376. doi: 10.3390/cells10061376.
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7. Murrariy, P. et al. (2000) Endotext.

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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