

## Product datasheet for **AR50001PU-N**

### Somatotropin / Growth Hormone / GH1 (recombinant) Human Protein

#### Product data:

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	Somatotropin / Growth Hormone / GH1 (recombinant) human recombinant protein, 0.5 mg
<b>Species:</b>	Human
<b>Expression Host:</b>	E. coli
<b>Expression cDNA Clone or AA Sequence:</b>	MFPTIPLSRL FDNAMLRAHR LHQLAFDTYQ EFEEAYIPKE QKYSFLQNPQ TSLCFSESIP TPSNREETQQ KSNLELLRIS LLLIQSWLEP VQFLRSVFAN SLVYGASDSN VYDLLKLEE GIQTLMGRL E DGSPTGQIF KQTYSKFDTN SHNDDALLKN YGLLYCFRKD MDKVETFLRI VQCRSVEGSC GF
<b>Predicted MW:</b>	22.2 kDa
<b>Concentration:</b>	lot specific
<b>Purity:</b>	>95% by SDS - PAGE
<b>Buffer:</b>	Presentation State: Purified State: Liquid purified protein Buffer System: 88 mM mannitol, 5 mM phosphate, pH 7.4
<b>Bioactivity:</b>	Measured in a cell proliferation assay using Nb2-11 Rat lymphoma cells. The ED50 range ≤ 0.2ng/ml.
<b>Endotoxin:</b>	< 1.0 EU per 1 microgram of protein (determined by LAL method)
<b>Preparation:</b>	Liquid purified protein
<b>Protein Description:</b>	Recombinant human growth hormone(rhGH ) was purified by FPLC gel-filtration chromatography, after refolding of the isolated inclusion bodies in a renaturation buffer.
<b>Storage:</b>	Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing.
<b>Stability:</b>	Shelf life: one year from despatch.
<b>RefSeq:</b>	<a href="#">NP_000506</a>
<b>Locus ID:</b>	2688
<b>UniProt ID:</b>	<a href="#">P01241</a>
<b>Cytogenetics:</b>	17q23.3
<b>Synonyms:</b>	Pituitary growth hormone, Growth hormone 1, HGH



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**Summary:**

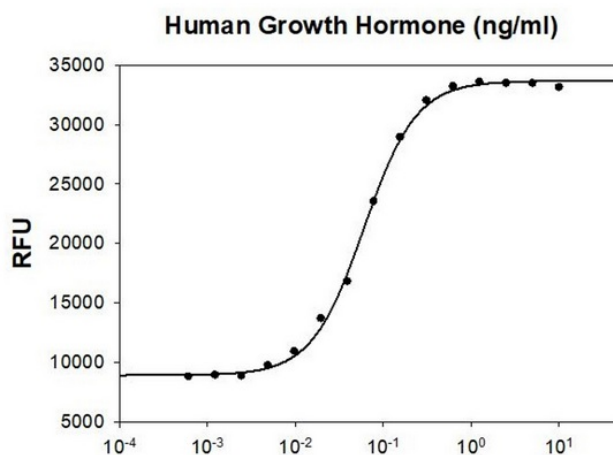
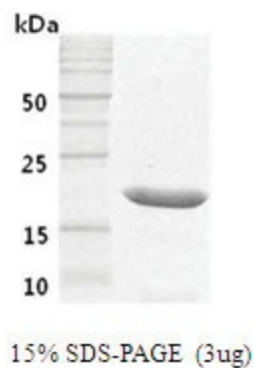
The protein encoded by this gene is a member of the somatotropin/prolactin family of hormones which play an important role in growth control. The gene, along with four other related genes, is located at the growth hormone locus on chromosome 17 where they are interspersed in the same transcriptional orientation; an arrangement which is thought to have evolved by a series of gene duplications. The five genes share a remarkably high degree of sequence identity. Alternative splicing generates additional isoforms of each of the five growth hormones, leading to further diversity and potential for specialization. This particular family member is expressed in the pituitary but not in placental tissue as is the case for the other four genes in the growth hormone locus. Mutations in or deletions of the gene lead to growth hormone deficiency and short stature. [provided by RefSeq, Jul 2008]

**Protein Families:**

Druggable Genome, Secreted Protein

**Protein Pathways:**

Cytokine-cytokine receptor interaction, Jak-STAT signaling pathway, Neuroactive ligand-receptor interaction

**Product images:**

Human Growth Hormone Measured in a cell proliferation assay using Nb2-11 Rat lymphoma cells. The ED50 range  $\leq$  0.2ng/ml.