

Product datasheet for **AR31189PU-S**

Somatotropin / Growth Hormone / GH1 Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Somatotropin / Growth Hormone / GH1 human recombinant protein, 10 µg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MFPTIPLSRL FDNAMLRAHR LHQLAFDTYQ EFEEAYIPKE QKYSFLQNPQ TSLCFSESIP TPSNREETQQ KSNLELLRIS LLLIQSWLEP VQFLRSVFAN SLVYGASDSN VYDLLKLEE GIQTLMGRLE DGSPTGQIF KQTYSKFDTN SHNDDALLKN YGLLYCFRKD MDKVETFLRI VQCRSVEGSC GF
Predicted MW:	22.3 kDa
Purity:	>98% pure by SDS-PAGE gel and HPLC analyses
Buffer:	Presentation State: Purified State: Lyophilized (0.2µ Sterile filtered) purified protein from 10 mM Sodium Phosphate, pH 8.5
Bioactivity:	Biological: Determined by its ability to stimulate the proliferation of rat Nb2-11 cells. The expected ED50 is ≤ 0.05 ng/ml, corresponding to a specific activity of ≥ 2 x 10 ⁷ units/mg.
Reconstitution Method:	Restore in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.
Preparation:	Lyophilized (0.2µ Sterile filtered) purified protein
Protein Description:	Recombinant Human Growth Hormone is a 22.3 kDa, single, non-glycosylated polypeptide chain containing 192 amino acid residues.
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	<u>NP_000506</u>
Locus ID:	2688



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UniProt ID:	<u>P01241</u>
Cytogenetics:	17q23.3
Synonyms:	Pituitary growth hormone, Growth hormone 1, HGH
Summary:	<p>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]</p>
Protein Families:	Druggable Genome, Secreted Protein
Protein Pathways:	Cytokine-cytokine receptor interaction, Jak-STAT signaling pathway, Neuroactive ligand-receptor interaction