

Product datasheet for **AR09032PU-L**

Somatotropin / Growth Hormone / GH1 (20 kDa Variant) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Somatotropin / Growth Hormone / GH1 (20 kDa Variant) human recombinant protein, 0.5 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MFPTIPLSRL FDNAMLRAHR LHQLAFDTYQ EFNPTSLCF SESIPTPSNR EETQQKSNLE LLRISLLLIQ SWLEPVQFLR SVFANSLVYG ASDSNVYDLL KDLEEGIQTL MGRLEDGSPR TGQIFKQTY S KFDTN SHNDD ALLKNYGLLY CFRKDMDKVE TFLRIVQCRS VEGSCGF
Predicted MW:	20 kDa
Concentration:	lot specific
Purity:	>95% pure by SDS PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 88 mM Mannitol, 5 mM phosphate, pH 7.4
Bioactivity:	Biological: Measured in a cell proliferation assay using Nb2-11 Rat lymphoma cells. The ED50 for this effect is less or equal to 1 ng/ml.
Endotoxin:	< 1.0 EU per 1 microgram of protein (determined by LAL method)
Preparation:	Liquid purified protein
Protein Description:	Recombinant 20 KDa human growth hormone was purified by FPLC gel-filtration chromatography, after refolding of the isolated inclusion bodies in a renaturation buffer.
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	NP_000506
Locus ID:	2688
UniProt ID:	P01241
Cytogenetics:	17q23.3
Synonyms:	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: