

Growth Hormone Recombinant Protein | GH1 recombinant protein

Mouse Growth Hormone Recombinant

CATALOG #	HOST
AAA76101	E Coli (Host protein expression may be lot-specific and can be subject to change during production, including bulk orders)

PRODUCT SYNONYMS

Growth Hormone; Mouse Growth Hormone Recombinant; Somatotropin; gh1; gh-1; growth hormone; GH1 recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli (Host protein expression may be lot-specific and can be subject to change during production, including bulk orders)
Purity/Purification	>95%, as determined by SDS-PAGE and HPLC
Form/Format	Recombinant Mouse Growth Hormone was lyophilized from 0.2 um filtered 100mM NaCl, 20mM PB, pH 7.4.
Sequence	MATDSRTSWL LTVSLCLLW PQEASAFPAM PLSSLFSNAV LRAQHLHQLA ADTYKEFERA YIPEGQRYSI QNAQA AFCFS ETIPAPTGKE EAQQRDMEL LRFSLLLIQS WLGPVQFLSR IFTNSLMFGT SDRVYEKLKD LEEGIQALMQ ELEDGSPRVG QILKQTYDKF DANMRSDDAL LKNYGLLS CF KKDLHKAETY LRVMKCRRFV ESSCAF
Sequence Length	216
Domain	four helix cytokine core
Host Note	Optimized DNA sequence encoding Mouse Growth Hormone mature chain was expressed in Escherichia Coli.
Endotoxin	Endotoxin content was assayed using a LAL gel clot method. Endotoxin level was found to be less than 0.1 ng/ug (1EU/ug).
Reconstitution	A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.
Molecular Weight Note	Native Mouse Growth Hormone is generated by the proteolytic removal of the signal peptide and propeptide, the molecule has a calculated molecular mass of approximately 22 kDa. Recombinant GH is a disulfide-linked homodimeric protein consisting of 191 amino acid residue subunits, and migrates as an approximately 22 kDa protein under non-reducing and reducing conditions in SDS-PAGE.
Preparation and Storage	The lyophilized protein is stable for at least 2 years from date of receipt at -20 degree C. Upon reconstitution, this cytokine can be stored in working aliquots at 2 degree - 8 degree C for one month, or at -20 degree C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.

ADDITIONAL INFORMATION

Related Product Information for GH1 recombinant protein	The physiological activity for which growth hormone is best known is the promotion of growth of bone, cartilage, and soft tissues. Detectable levels of growth hormone are found throughout the remainder of adulthood, suggesting other functions in addition to promotion of growth. Growth hormone may be important for the maintenance of lean body mass; most growth-promoting effects of growth hormone are mediated by IGF-1 the synthesis of which is regulated by growth hormone. The biological activities of growth hormone are mediated by receptors belonging to one of the Cytokine receptor families. Growth hormone has been shown to be produced by T- cells, B-cells, and macrophages. In human lymphocytes growth hormone appears to up-regulate its own expression. Growth hormone appears to act as an enhancer of immune responses and is produced in considerable amounts by T- helper cells.
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Product Categories/Family for GH1 recombinant protein	Cytokines
References	• Growth Hormone secretagogues and Growth Hormone releasing peptides act as orthosteric super-agonists but not allosteric regulators for activation of the g protein go1 by the ghrelin receptor .<i>Mol. Pharmacol.</i>, Oct 2009; 76: 802 - 811. • <i>statement by the Growth Hormone research society on the gh/igf-i axis in extending health span</i> .<i>J Gerontol A Biol Sci Med Sci</i>, Oct 2009; 64A: 1039 - 1044. • <i>the p561t polymorphism of the Growth Hormone receptor gene has an inhibitory effect on mandibular growth in young children</i> .<i>Eur J Orthod</i>, Oct 2009; 31: 536 - 541. • <i>central ghrelin regulates peripheral lipid metabolism in a Growth Hormone-independent fashion</i> .<i>Endocrinology</i>, Oct 2009; 150: 4562 - 4574. • <i>effects of syndyphalin-33 on feed intake and circulating measures of Growth Hormone, cortisol, and immune cell populations in the recently weaned pig</i> .<i>J Anim Sci</i>, Oct 2009; 87: 3218 - 3225.

NCBI AND UNIPROT INFORMATION

NCBI GI #	6679997
NCBI GeneID	14599
NCBI Accession #	NP_032143.1
NCBI GenBank Nucleotide #	NM_008117.3
UniProt Accession #	P06880; Q544X1; Q8BK24; Q9R2C3
Molecular Weight	24,716 Da
NCBI Official Full Name	somatotropin
UniProt Protein Name	Somatotropin
UniProt Gene Name	Gh1
UniProt Synonym Gene Names	Gh
UniProt Entry Name	SOMA_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/gh1-recombinant-protein-e-coli/76101>