

## Mouse Growth Hormone (GH), E.coli Recombinant

### Product Data Sheet

Cat. No.:	RP1765400100	RP1765400200	RP1765401000
	100 µg	200 µg	1 mg

#### Introduction:

Growth Hormone (GH), also known as Somatotropin, 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.

#### Description:

Mouse Growth Hormone Recombinant produced in E.coli is a single, non-glycosylated, polypeptide chain containing 191 amino acids and having a molecular mass of 22 kDa.  
Mouse GH is purified by proprietary chromatographic techniques.

#### Source:

*Escherichia coli*.

#### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

#### Formulation:

Mouse Growth Hormone Recombinant contains 50mM Tris-HCl, pH8.0, 150mM NaCl buffer.

#### Solubility:

It is recommended to reconstitute the lyophilized Growth Hormone murine in sterile 18MΩ-cm H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

#### Stability:

Lyophilized mouse Growth Hormone although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution mouse GH should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

#### Amino Acid Sequence:

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Phe-Pro-Ala-Met.

#### Purity:

Greater than 95.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

#### Biological Activity:

Recombinant Mouse Growth Hormone is fully biologically active when compared to standard human Growth Hormone which is 3 units/mg.

#### Usage:

BioVendor's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.