

## **GH, Mouse**

**Cat. No.:** Z02192-50

**Size:** 50.0 ug

**Synonyms:** GH (Mouse);

**Description:**

Growth Hormone (GH), mouse 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.

GenScript Recombinant Mouse Growth Hormone, produced in *E. coli*, is a single, non-glycosylated, polypeptide chain containing 191 amino acids and having a molecular mass of 22,000 Da.

**Source:** *E. coli*

**Species:** Mouse

**Molecular Weight:** 22,000 Da

**Formulation:** The protein was lyophilized after extensive dialysis against 50mM Tris-HCl, pH8.0, 500mM NaCl buffer.

**Reconstitution:** It is recommended to reconstitute the lyophilized rmGH in sterile 18 M&#8486;-cm H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Purity:** The purity of GenScript Recombinant Mouse Growth Hormone is greater than 95% as determined by the following methods:

- (a) SEC-HPLC analysis
- (b) Reducing and non-reducing SDS-PAGE Silver-Stained gel analysis

**Endotoxin Level:** The endotoxin level of GenScript Recombinant Mouse Growth Hormone is below 0.1 ng/µg (1 IEU/µg) determined by LAL test.

**Storage:** Lyophilized Mouse Growth Hormone remains stable at room temperature for three weeks, but it is best stored desiccated below -18°C. Upon reconstitution Mouse Growth Hormone should be stored at 4°C for up to seven days. For long term storage it is recommended that a carrier protein (0.1% HSA or BSA ) be added. Avoid repeated freeze-thaw cycles.