

Growth Hormone Mutant, zebrafish recombinant (rzGH Mutant)

Catalog No: 97354
Lot No: XXXXX
Source: E. coli

Synonyms: GH1, GH, GHN, GH-N, hGH-N, Pituitary growth hormone, Growth hormone 1, Somatotropin

Background

GH is a member of the somatotropin/prolactin family of hormones which play an important role in growth control. Its major role in stimulating body growth is to stimulate the liver and other tissues to secrete IGF-1. It stimulates both the differentiation and proliferation of myoblasts. It also stimulates amino acid uptake and protein synthesis in muscle and other tissues.

Description

Somatotropin Mutant G113R Zebrafish recombinant produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 185 amino acids with an additional Ala at the N-terminus and having a molecular mass of 21.18 kDa. Somatotropin Mutant G113R is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

The protein was lyophilized from a concentrated (1 mg/ml) solution with 0.5% NaHCO₃ pH 8.

Solubility

It is recommended to reconstitute the lyophilized Zebrafish Mutant G113R in 0.4% NaHCO₃ or water adjusted to pH-9, not less than $100 \mu g/ml$, which can then be further diluted to other aqueous solutions, preferably in a presence of a carrier protein such as BSA or similar.

Stability

Lyophilized Growth-Hormone, although stable at room temperature for at least two weeks, should be stored desiccated below -18°C. Upon reconstitution and filter sterilization GH can be stored at 4°C, pH 9 for up to 4 weeks. For long term storage and more diluted solutions it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freezethaw cycles.

Purity

Greater than 99.0% as determined by (a) Analysis by SEC-HPLC, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

The sequence of the first six N-terminal amino acids was determined and was found to be Ala-Gln-Arg-Leu-Phe-Asn.

Usage

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