Active Recombinant Zebrafish Growth Hormone 1

Cat. No. gh1-644Z **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Somatotropin 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. The Zebrafish Recombinant is purified by proprietary chromatographic techniques.
Species	Zebrafish
Source	Zebrafish
Description	GH 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.
Form	The protein was lyophilized from a concentrated (1mg/ml) solution with 0.5% NaHCO3 pH-8.

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Purity	Greater than 99.0% as determined by: (a) Analysis by SEC-HPLC. (b) Analysis by SDS-PAGE.
Bio-activity	Zebrafish Growth-Hormone is biologically active in PDF-P1 3B9 cells stably transfected with rabbit GH receptors.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Solubility	It is recommended to reconstitute the lyophilized Zebrafish Growth-Hormone in 0.4% NaHCO3 or water adjusted to pH-9, not less than 100µg/ml, which can then be further diluted to other aqueous solutions, preferably in a presence of a carrier protein such as BSA or similar.
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.
Protein content	Lyophilized Zebrafish 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 freeze-thaw cycles.

GENE INFORMATION

Gene Name	gh1 growth hormone 1 [Danio rerio]
Official Symbol	gh1
Synonyms	gh1; ghl; somatotropin; gh
Gene ID	407639

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

mRNA Refseq	NM_001020492
Protein Refseq	NP_001018328
UniProt ID	Q1JQ34
Pathway	Jak-STAT signaling pathway; Neuroactive ligand-receptor interaction
Function	hormone activity
GrowthHormone 1	

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA