

Recombinant Bream Growth Hormone (rbrGH)

Certificate of Analysis and Data Sheet

➤ Source: E.Coli	➤ Catalog No. CTK-297
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➤ **Description :**

Recombinant Bream GH produced in E.Coli is a single, non-glycosylated, polypeptide chain containing having a molecular mass of 21410.01 Dalton. Bream GH shares 97% amino acid sequence identity with gilthead sea bream, 94% with red sea bream, 93% with the tuna, 91% with barramundi and 63% with the salmon. The rbrGH is purified by proprietary chromatographic techniques.

➤ **Physical Appearance:**

Sterile Filtered White lyophilized (freeze-dried) powder.

➤ **Formulation:**

The protein (1mg/ml) was lyophilized after extensive dialyses against 5mM phosphate buffer, 5mg mannitol and 1mg glycine.

➤ **Solubility:**

It is recommended to reconstitute the lyophilized rbrGH in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

➤ **Stability:**

Lyophilized rbrGH although stable at room temperature for 3 weeks, should be stored desiccated below -18 C. Upon reconstitution rbrGH 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 avoid freeze-thaw cycles.

➤ **Purity:**

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Anion-exchange FPLC.
- (c) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel.

➤ **Dimers and aggregates:**

Less than 1% as determined by silver-stained SDS-PAGE gel analysis.

➤ **Endotoxin:**

Less than 0.1 ng/µg (IEU/µg) of rbrGH.

➤ **Protein content:**

Protein quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm .
2. Analysis by RP-HPLC, using a standard solution of GH as a Reference Standard.

➤ **References:**

Flint D. J. & Gardner M.J. (1993) J. Endocrinol., 137, 203-211.

➤ **Usage:**

This material is offered for research, laboratory or further evaluation purposes.