

Gilthead Seabream Growth Hormone Recombinant Protein



RPPB0339

Product Information Protein Information

Product SKU:

RPPB0339

Accession:

P29971

Host:

Escherichia Coli.

Protein description:

Somatotropin Gilthead Seabream Recombinant Sparus Aurata produced in E.Coli is a single, non-glycosylated polypeptide chain containing 188 amino acids with an additional Ala at the N-terminus and having a molecular mass of 21.4 kDa. The Gilthead Seabream Growth-Hormone Recombinant is purified by proprietary chromatographic techniques.

Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Synonyms:

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

Formulation:

The protein was lyophilized from a concentrated (1mg/ml) solution with 0.02% NaHCO₃.

Purity:

Greater than 98.0% as determined by:(a) Analysis by SEC-HPLC.(b) Analysis by SDS-PAGE.

Solubility:

It is recommended to reconstitute the lyophilized Growth-Hormone Gilthead Seabream in 0.4% NaHCO₃ or water adjusted to pH 8-9, 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.

Stability:

Lyophilized Growth-Hormone Gilthead Seabream 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.

Amino Acid Sequence:

AQPITDGQRLFSIAVSRVQHLHLLAQRLFSDFESSLQTEEQPLNKIFLQ
DFCNCDYIISPDKHETQRSSVLKLLSISYRLVESWEFSPRSLSGGGAPR
NQISPKLSLKTGIHLLIRANEDGAEIFPDRSALQLAPYGNYYQSLGTDE
SLRRTYELLACFKKDMHKVETYLTVAKCRLSPEANCTL

Biological Activity:

Binding assays of the 125I-labeled gilthead seabream GH to dolphin fish liver microsomal fraction resulted in high specific binding characterized by a K_a of 1.93 nM and a B_{max} of 540 fmol/mg microsomal fraction protein. Recombinant gilthead seabream Growth Hormone, like ovine placental lactogen, exhibited growth-stimulating activity when applied orally to Sparus aurata larvae or intraperitoneally to juvenile fish.