

Gildhead Seabream Growth Hormone

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

PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING

Size	Order #	Lot #	Expiry Date
10 μg	1445.930.010		
50 µg	1445.930.050		
1 mg	1445.930.199		

Please enquire for bulk quantities and other vial sizes

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.

• Source E. Coli

• Purity ≥ 98 % (SDS-PAGE, SEC-HPLC)

• Endotoxin level $\leq 0.1 \text{ng/µg} (\leq 1 \text{EU/µg})$

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

NaHCO₃*

Physical state
Sterile filtered, lyophilized

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 Ka of 1.93 nM and a Bmax 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.

Reconstitution

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 $100\mu g/ml$, 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 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 avoid repeated freeze-thaw cycles**.

Amino Acid Sequence

AQPITDGQRL FSIAVSRVQH LHLLAQRLFS DFESSLQTEE QPQLNKIFLQ DFCNCDYII SPIDKHETQR SSVLKLLSIS YRLVESWEFP SRSLSGGSAP R NQISPKLS ELKTGIHLLI RANEDGAEIF PDRSALQLAP YGNYYQSLGT DE SLRRTYE LLACFKKDMH KVETYLTVAK CRLSPEANCT L

Usage: For research use only. Not for use in diagnostic or therapeutic procedures. Not for human use.

^{*}The Buffer may vary depending on the Lot #. Please contact our technical support if you have specific requirements.