

# Chicken Growth Hormone Antagonist Recombinant Protein



RPPB0345

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## Product Information    Protein Information

**Product SKU:**

RPPB0345

**Host:**

Escherichia Coli.

**Protein description:**

Somatotropin Chicken Antagonist Recombinant mutein G119R produced in E.Coli is a single, non-glycosylated polypeptide chain containing 191 amino acids with an additional Ala at the N-terminus and having a molecular mass of 22.3 kDa. The Chicken Growth-Hormone Antagonist 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 0.3% NaHCO<sub>3</sub> pH-8.

**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 Chicken antagonist in 0.4% NaHCO<sub>3</sub> 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 Chicken antagonist 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:**

The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Thr-Phe-Pro-Ala.

**Biological Activity:**

Recombinant Chicken Growth Hormone G119R mutant did not bind to ovine GHR-ECD and was devoid of any biological activity in FDC-P1 3B9 cells. However, in binding experiments that were carried out using chicken liver membranes, both ovine GH and chicken GH showed similar IC<sub>50</sub> values in competition with 125I-ovine GH, while the IC<sub>50</sub> of G119R mutein was 10-fold higher. These results emphasize the importance of species specificity and indicate the possibility of antagonistic activity of chGH G119R in homologous system.