

Recombinant Canine Growth Hormone

#R00627

Size: 5 µg/100 µg/500 µg

Stability & Storage

Please use a manual defrost freezer and avoid repeated freeze-thaw cycles.

-Lyophilized protein should be stored at ≤ -20°C, stable for 12 months after receipt.

-Reconstituted protein solution can be stored at 2-8°C for 1-2 weeks.

-Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Growth hormone (GH), also known as somatotropin, is a member of a family of growth factors that includes prolactin, placental lactogens, proliferins, and somatolactin. It is a peptide hormone that stimulates growth, cell reproduction and regeneration in humans and other animals. Growth hormone is a 190-amino acid, single-chain polypeptide that is synthesized, stored, and secreted by somatotrophic cells within the lateral wings of the anterior pituitary gland. The pulsatile release of GH into circulation is regulated by the concerted actions of the hypothalamic hormones-GH-releasing hormone (GHRH) and somatostatin (SST) as well as by signals from the periphery-ghrelin and leptin. The canine GH cDNA encodes a 216 amino acid (a.a.) residue precursor protein with a 26 a.a. putative signal peptide. By alternative splicing, at least two isoforms of GH have been identified.

AA Sequence

Phe27-Phe216, Accession #P33711

Reconstitution

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. Reconstitute in sterile distilled water to a concentration of 0.1-1.0 mg/mL. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Product Specification

Species	Canine
Source	CHO Cells
Molecular Weight	Recombinant Canine Growth Hormone Protein, a monomer, containing 190 amino acid residues, has a predicted molecular mass of approximately 21.7 kDa.
Purity	> 98% by SDS-PAGE gel and HPLC analyses.
Biological Activity	Determined by the dose-dependent stimulation of the proliferation of rat Nb2-11 lymphoma cells. The expected ED ₅₀ is less than 0.1 ng/ml, corresponding to a specific activity of > 1.0 × 10 ⁷ units/mg.
Formulation	Lyophilized from a 0.22 µm

	filtered solution of in PBS, with Tween-20. See CoA for details.
Endotoxin	Less than 0.1 EU/μg of rCaGH as determined by LAL test.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
