

# Recombinant Human Glycoprotein Hormones, Alpha Polypeptide

Cat. No. CGA-109H Lot. No. (See product label)

## SPECIFICATION

<b>Product Overview</b>	Recombinant Human CG is produced in <i>Chinese hamster ovary (CHO)</i> cells by recombinant DNA technology is a single, glycoprotein chain consisting of two non-covalently linked subunits - designated a and b consisting of 92 and 145 amino acid residues (237 a.a. total, Mw: 36.7kDa).
<b>Species</b>	Human
<b>Source</b>	CHO
<b>Description</b>	The primary structure of the a chain of CG is identical to that of the a chain of Human CG, FSH and LH. The glycoform pattern of the a subunit of Recombinant CG is closely comparable to urinary derived hCG (u-hCG), the differences mainly being due to the branching and sialylation extent of the oligosaccharides. The b chain has both O and N-glycosylation sites and its structure and glycosylation pattern are also very similar to that of urinary hCG. Recombinant Human CG is purified by proprietary chromatographic techniques.
<b>Physical Appearance</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Biological Activity</b>	The biological activity of choriogonadotropin alfa is determined by using the seminal vesicle weight gain test in male rats described in the "Chorionic Gonadotrophins" monograph of the European Pharmacopoeia. The in vivo biological activity of choriogonadotropin alfa has been calibrated against the third international reference

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preparation IS75/587 for chorionic gonadotropin.

**Solubility**

It is recommended to reconstitute the lyophilized CG in sterile 18MΩ-cm H<sub>2</sub>O not less than 100g/ml, which can then be further diluted to other aqueous solutions.

**Formulation**

Recombinant Human Chorionic Gonadotropin was lyophilized from a concentrated (1mg/ml) solution containing 105mg sucrose and 3.43 phosphoric acid.

**Purity**

Greater than 99.0% as determined by: (a) Analysis by RP-HPLC. (b) Anion-exchange FPLC. (c) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel.

**Stability**

Lyophilized Recombinant CG although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rhCG 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.

## GENE INFORMATION

**Gene Name**

CGA glycoprotein hormones, alpha polypeptide [ Homo sapiens ]

**Synonyms**

CGA; glycoprotein hormones, alpha polypeptide; HCG; LHA; FSHA; GPHa; TSHA; GPHA1; CG-ALPHA; chorionic gonadotropin, alpha polypeptide; follicle-stimulating hormone alpha subunit; Glycoprotein hormones alpha chain; Anterior pituitary glycoprotein hormones common subunit alpha; Follitropin alpha chain; Follicle-stimulating hormone alpha chain; FSH-alpha; Lutropin alpha chain; Luteinizing hormone alpha chain; Thyrotropin alpha chain; Thyroid-stimulating hormone alpha chain; TSH-alpha; Choriogonadotropin alpha chain; Chorionic gonadotrophin subunit alpha; CG-alpha; OTTHUMP00000016825

**Gene ID**

1081

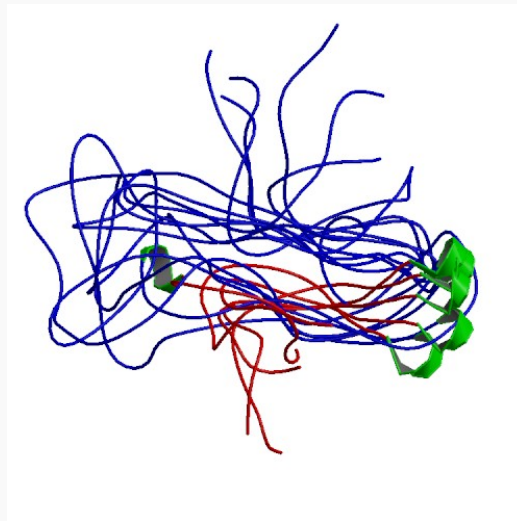
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<b>mRNA Refseq</b>	<a href="#">NM_000735</a>
<b>Protein Refseq</b>	<a href="#">NP_000726</a>
<b>MIM</b>	<a href="#">118850</a>
<b>UniProt ID</b>	<a href="#">P01215</a>
<b>Chromosome Location</b>	6q14-q21
<b>Pathway</b>	Autoimmune thyroid disease; GnRH signaling pathway; Neuroactive ligand-receptor interaction
<b>Function</b>	hormone activity

PDB rendering based on 1dz7.



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