

Recombinant Human GF2 protein, Fc-tagged

Cat. No. IGF2-385H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human IGF2 protein (Ala25-Glu91), fused to human IgG1 Fc tag at N-terminus, was expressed in human 293 cells (HEK293).
Species	Human
Source	HEK293
ProteinLength	67
Description	Insulin-like growth factor 2 (IGF-2) is also known as Somatomedin-A, IGF-II, PP9974, and is one of three protein hormones that share structural similarity to insulin. IGF-2 exerts its effects by binding to the IGF-1 receptor. IGF2 may also bind to the IGF-2 receptor (also called the cation-independent mannose 6-phosphate receptor), which acts as a signalling antagonist; that is, to prevent IGF2 responses. The major role of IGF2 is as a growth promoting hormone during gestation. In the process of Folliculogenesis, IGF2 is created by Theca cells to act in an autocrine manner on the theca cells themselves, and in a paracrine manner on Granulosa cells in the ovary. IGF2 promotes granulosa cell proliferation during the follicular phase of the menstrual cycle, acting alongside Follicle Stimulating Hormone (FSH). After ovulation has occurred, IGF-2 promotes progesterone secretion during the luteal phase of the menstrual cycle together with Luteinizing Hormone (LH). Thus, IGF2 acts as a Co-hormone together with both FSH and LH. IGF-2 may play a key role in memory and could potentially be used to treat Alzheimer's Disease. It is sometimes produced in excess in islet cell tumours, causing hypoglycemia. Doege-Potter syndrome is a

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	paraneoplastic syndrome in which hypoglycemia is associated with the presence of one or more non-islet fibrous tumors in the pleural cavity. has been shown to interact with IGFBP3 and Transferrin.
Form	Lyophilized from 0.22 um filtered solution in 50 mM Tris, 100 mM Glycine, pH7.5, 10% trehalose.
Molecular Mass	The protein has a calculated MW of 35 kDa. The protein migrates as 36 kDa under reducing (R) condition (SDS-PAGE).
Endotoxin	Less than 1.0 EU per ug by the LAL method.
Purity	>95% as determined by SDS-PAGE.
Storage	For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles. This product is stable after storage at: -20 centigrade to -70 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.

GENE INFORMATION

Gene Name	IGF2
Official Symbol	IGF2
Synonyms	IGF2; insulin-like growth factor 2 (somatomedin A); C11orf43, chromosome 11 open

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reading frame 43; insulin-like growth factor II; FLJ44734; somatomedin-A; insulin-like growth factor type 2; IGF-II; PP9974; C11orf43; FLJ22066

Gene ID 3481

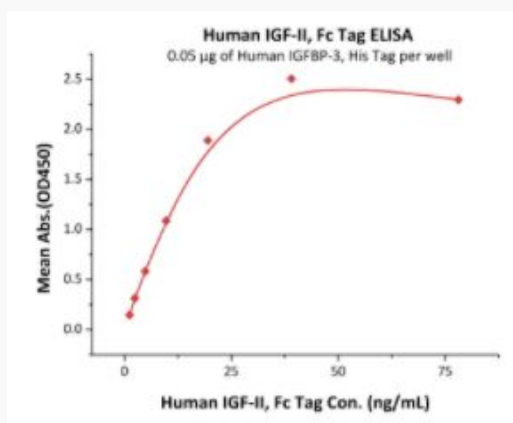
mRNA Refseq NM_000612

Protein Refseq NP_000603

MIM 147470

UniProt ID P01344

Bioactivity-ELISA of IGF2-385H



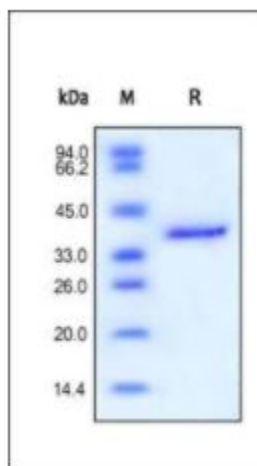
Immobilized Human IGFBP-3, His Tag at 0.5 µg/mL (100 µL/well) can bind Human IGF-II, Fc Tag with a linear range of 1-20 ng/mL (QC tested).

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**SDS-PAGE of IGF2-
385H**



Human IGF-II, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.