Datasheet for ABIN2181264

IGF2 Protein (AA 25-91) (Fc Tag)

2 Images

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Overview

Quantity:	100 µg
Target:	IGF2
Protein Characteristics:	AA 25-91
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This IGF2 protein is labelled with Fc Tag.

Product Details

Sequence:	AA 25-91
Characteristics:	This protein carries a human IgG1 Fc tag at the N-terminus. The protein has a calculated MW of 35 kDa. The protein migrates as 36 kDa under reducing (R) condition (SDS-PAGE).
Purity:	>95 % as determined by SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	IGF2
Alternative Name:	IGF-II (IGF2 Products)

Target Details

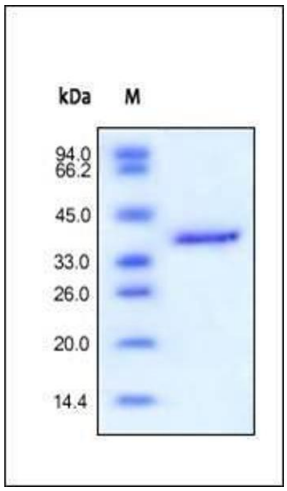
Background:	Insulin-like growth factor 2 (IGF-2) is also known as Somatomedin-A, IGF-II, PP9974, and is one of three protein hormones that share structural similarity to insulin. IGF-2 exerts its effects by binding to the IGF-1 receptor. IGF2 may also bind to the IGF-2 receptor (also called the cation-independent 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 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.
Molecular Weight:	34.4 kDa
Pathways:	Hormone Activity, Regulation of Hormone Metabolic Process, Regulation of Hormone Biosynthetic Process, Regulation of Carbohydrate Metabolic Process, Activated T Cell Proliferation

Application Details

Restrictions:	For Research Use only

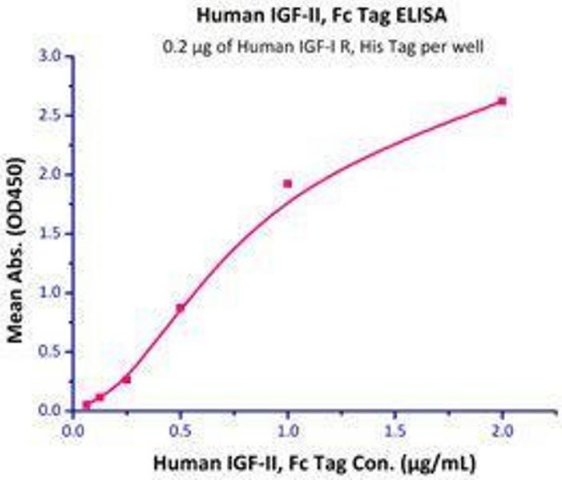
Handling

Format:	Lyophilized
Buffer:	50 mM Tris, 100 mM Glycine, pH 7.5
Handling Advice:	Please avoid repeated freeze-thaw cycles.
Storage:	-20 °C
Storage Comment:	No activity loss was observed after storage at: In lyophilized state for 1 year (4 °C-8 °C), After reconstitution under sterile conditions for 1 month (4 °C-8 °C) or 3 months (-20 °C to -70 °C).



SDS-PAGE

Image 1. 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%.



Binding Studies

Image 2. Immobilized Human IGF-I R, His Tag (Cat# IGR-H5229) at 2 μg/mL (100 μl/well),can bind Human IGF-II, Fc Tag (Cat# IG2-H4260) with a linear range of 0.06-1 μg/mL.