

Human IGF 1 Protein

Cat #: PRP1955

Size: 100ug/1mg

Product Information

	Product Name: Human IGF 1 Protein		
REF	Catalog Number: PRP1955	LOT	Lot Number: Refer to product label
	Purity: > 99 % as determined by SDS-PAGE		
	Storage: Store at -20°C		Preparation method: <i>E. coli</i>
	Shipping: The product is shipped at ambient temperature.		

Background: IGF I, also known as Mechano Growth Factor, somatomedin-C, IGF-I, and IGF1, is a secreted protein that belongs to the insulin family. The insulin family, comprised of insulin, relaxin, insulin-like growth factors I and II (IGF-I and IGF-II), and possibly the beta-subunit of 7S nerve growth factor, represents a group of structurally related polypeptides whose biological functions have diverged. The IGFs, or somatomedins, constitute a class of polypeptides that have a key role in pre-adolescent mammalian growth. IGF-I expression is regulated by GH and mediates postnatal growth, while IGF-II appears to be induced by placental lactogen during prenatal development. IGF1 / IGF-I may be a physiological regulator of [1-14C]-2-deoxy-D-glucose (2DG) transport and glycogen synthesis in osteoblasts. IGF1 / IGF-I stimulates glucose transport in rat bone-derived osteoblastic (PyMS) cells and is effective at much lower concentrations than insulin, not only regarding glycogen and DNA synthesis but also about enhancing glucose uptake. Defects in IGF1 / IGF-I are the cause of insulin-like growth factor I deficiency (IGF1 deficiency) which is an autosomal recessive disorder characterized by growth retardation, sensorineural deafness, and mental retardation.

Sequence: Amino acid sequence derived from Human IGF1 Protein (P05019-1) (Gly 49-Ala 118) was expressed.

Protein length: The Recombinant Human IGF1 Protein consists of 71 amino acids and predicts a molecular mass of 7.8 Kda.

Biological Activity: Testing in progress.

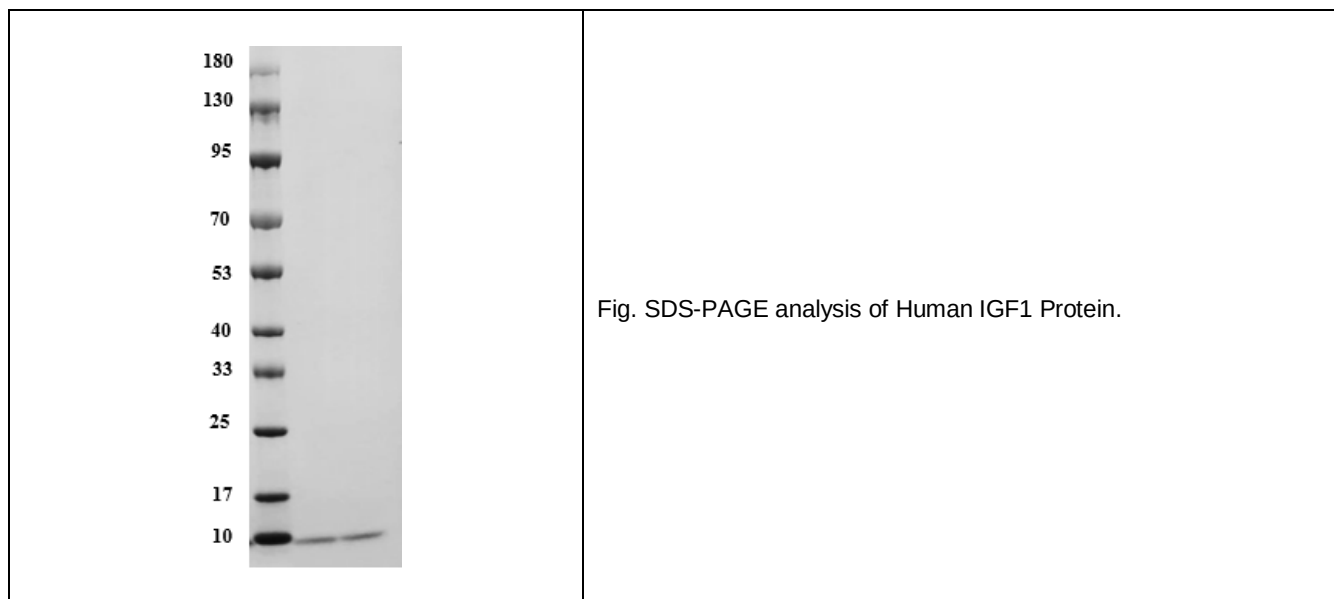
Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method.

Formulation: Lyophilized from sterile 20 mM Tris with 150 mM NaCl, pH 7.4.

Storage Instructions: Lyophilized Human IGF1 Protein product should be stored desiccated below -20°C. Upon reconstitution, the protein should be stored at 4°C between 2-7 days and for future use below -20°C. For long term storage it

is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Usage notes: Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized Human IGF1 Protein using the buffer we provided not less than 100µg/ml, which can then be further diluted to other aqueous solutions.



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