


Human IGF1 protein

Cat #: PRP100153

Size: 100µg/1mg

Product Information

	Product Name: Human IGF1 protein		
REF	Catalog Number: PRP100153	LOT	Lot Number: Refer to product label
	Purity: > 95 % as determined by SDS-PAGE		
	Storage: Store at -20°C		Preparation method: E. coli
	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 which 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 with regard to 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 mature form of human IGF1 isoform 1 (P05019-1) (Gly 49-Ala 118) was expressed and purified.

Protein length: The recombinant mature form of human IGF1 consisting of 71 amino acids and has a calculated molecular mass of 7.8KDa.

Formulation: Lyophilized from sterile 30% Acetonitrile, 0.1% TFA.

Storage Instructions: Lyophilized Human IGF1 protein product should be stored desiccated below -18°C. Upon reconstitution, the protein 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 prevent freeze-thaw cycles.

Usage notes: Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized Human IGF1 protein in sterile ddH₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

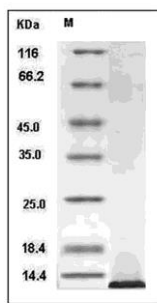


Fig. SDS-PAGE analysis of Human IGF1 protein.

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