



Recombinant Protein Technical Manual
Recombinant Human IGF/IGF-I/IGF1 Protein (Active)
RPES0732

Product Data:

Product SKU: RPES0732

Size: 100µg

Species: Human

Expression host: Yeast

Uniprot: NP_001104754.1

Protein Information:

Molecular Mass: 7.7 kDa

AP Molecular Mass:

Tag:

Bio-activity: Measured in a cell proliferation assay using MCF-7 cells. The ED50 for this effect is 15-60ng/mL.

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS,pH 7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application: Cell Culture

Synonyms: IGF;IGF-I;IGF1A;IGFI;IGF-I;MGF

Immunogen Information:

Sequence: Gly49-Ala118

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 [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.