

IGF-I/IGF1/MGF, Human, Recombinant

Cat. No. : PCK017

General Information

Synonyms	Insulin-Like Growth Factor I;IGF-I;Mechano Growth Factor;MGF;Somatomedin-C;IGF1;IBP1
Species	Human
Expression host	E.coli
Sequence	Gly49-Ala118
Accession	P05019
Mol mass	7.6 kDa
Expiration date	12 months

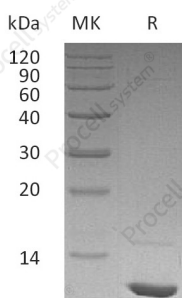
Product feature

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at -5~-20°C for 3 months.
Shipping	Ice bag
Formulation	Lyophilized from a 0.2 μm filtered solution of 20 mM NaAc-HAc, pH 4.5.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μg/mL. Dissolve the lyophilized protein in 60 mM Acetic Acid. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Background

Insulin-Like Growth Factor I (IGF1) belongs to the family of Insulin-Like Growth Factors that are structurally homologous to proInsulin. Mature IGFs are generated by proteolytic processing of inactive precursor Proteins, which contains the N-and C-terminal propeptide regions. Mature human IGF-I consisting of 70 amino acids has 94% identity with mouse IGF-I and exhibits cross-species activity. IGF-1 binds IGF-IR, IGF-IIR, and the Insulin Receptor and plays a key role in cell cycle progression, cell proliferation and tumor progression. IGF-1 expression is regulated by growth hormone. R3 IGF-1 is an 83 amino acid analog of IGF-1 comprising the complete human IGF-1 sequence with the substitution of an Arg (R) for the Glu (E) at position three, hence R3, and a 13 amino acid extension peptide at the N terminus. R3 IGF-1 has been produced with the purpose of increasing biological activity. R3 IGF-1 is significantly more potent than human IGF-I in vitro.

SDS-PAGE



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