Recombinant Human LR3-IGF-1

Catalog No: C023

Description	Recombinant Human LR3 Insulin-Like Growth Factor-I is produced by our E.coli expression system and the target gene encoding Gly49-Ala118 is expressed.
Source	E. coli
Alternative name	Insulin-Like Growth Factor I; IGF-I; Mechano Growth Factor; MGF; Somatomedin-C; IGF1; IBP1
Accession No.	P05019
Formulation	Lyophilized from a 0.2 μm filtered solution of 300mM HAc-NaAc, pH 6.5.
Quality Control	Bioactivity* ED50 is greater than 200 ng/ml. measured by an IGF binding protein assay. Purity: Greater than 95% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1 ng/μg (1 IEU/μg).
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Storage	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Amino Acid Sequence	MFPAMPLSSLFVNGPRTLCGAELVDALQFVCGDRGFYFNKPTGYGSSSRRAPQTGIVDECCFRSCD LRRLEMYCAPLKPAKSA
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