

Active Recombinant Human IGF1 Protein

Cat. No. IGF1-137H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	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.
Species	Human
Source	E.coli
ProteinLength	Gly49-Ala118
Description	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.
Form	Lyophilized from a 0.2 um filtered solution of 300mM HAc-NaAc, pH 6.5.
Bio-activity	ED50 is greater than 200 ng/ml. Measured by an IGF binding protein assay.

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AA Sequence	MFPAMPLSSLFVNGPRTLCGAELVDALQFVCGDRGFYFNKPTGYGSSRRAPQTGI VDECCFRSCD LRRLEMYCAPLKPAKSA
Endotoxin	Less than 0.1 ng/ug (1 EU/ug).
Purity	>95%
Storage	Lyophilized protein should be stored at < -20 centigrade, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7 centigrade for 2-7 days. Aliquots of reconstituted samples are stable at < -20 centigrade for 3 months.
Quality Statement	Purity: Greater than 95% as determined by reducing SDS-PAGE.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

GENE INFORMATION

Gene Name	IGF1 insulin like growth factor 1 [Homo sapiens (human)]
Official Symbol	IGF1
Synonyms	Insulin-Like Growth Factor I; IGF-I; Mechano Growth Factor; MGF; Somatomedin-C; IBP1; IGF; MGF; IGF1
Gene ID	3479
mRNA Refseq	NM_000618.5
Protein Refseq	NP_000609.1

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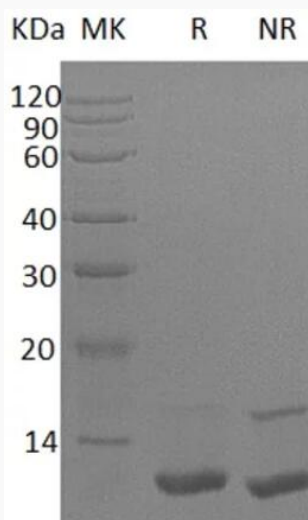
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MIM 147440

UniProt ID P05019

SDS-PAGE



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