

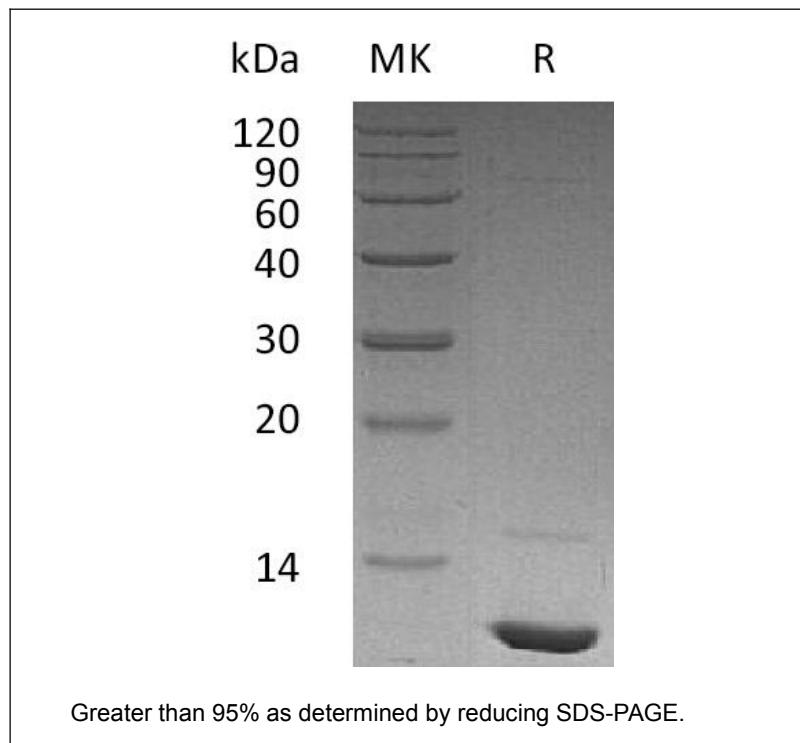


## LR3-IGF-1

E21-032

**Catalog Number:**E21-032**Amount:**10ug**Alternative:**Insulin-Like Growth Factor I; IGF-I; Mechano Growth Factor; MGF; Somatomedin-C; IGF1; IBP1**Storage/Stability:**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.**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.**Species:**Human**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 ddH2O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.**Endotoxin:**Less than 0.05 ng/µg (0.5 IEU/µg) as determined by LAL test.**Purity:**Greater than 95% as determined by reducing SDS-PAGE.**Description:**Recombinant Human Insulin-like Growth Factor I is produced by our E.coli expression system and the target gene encoding Gly49-Ala118 is expressed.**Product State:**Lyophilized**Ship Description:**The product is shipped at ambient temperature.**Formulation:**Lyophilized from a 0.2 µm filtered solution of 300mM NaAc, pH 6.5.**Expression system:**E.coli

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