

32-1340: Long R3 IGF1 Recombinant Protein

Alternative Name : R3 IGF1,R3 IGF-1,R3IGF1,R3IGF-1,LONG IGF1,LONG IGF-1,LONG R3 IGF1,LONG R3IGF1,LONG R3 IGF-1,LONG R3IGF-1.

Description

Source : Escherichia Coli. The LR3 is a long-term analog of human IGF-1, specifically designed and manufactured for mammalian cell culture to support large-scale manufacturing of recombinant biopharmaceuticals. Recombinant Human LR3 Insulin Like Growth Factor-1 produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 83 amino acids and having a molecular mass of 9.1kDa. IGF-1 (Insulin-like growth factor-1) is a major hormonal mediator of statural growth. Under regular circumstances, GH (growth hormone) binds to its receptor in the liver, and other tissues, and stimulates the synthesis/secretion of IGF-1. In target tissues, the Type 1 IGF receptor, that is homologous to the insulin receptor, is activated by IGF-1, leading to intracellular signaling which stimulates multiple processes leading to statural growth. IGF-1 metabolic actions are partly directed at stimulating the uptake of glucose, fatty acids, and amino acids so that metabolism supports growing tissues.

Product Info

Amount : 0.5mg
Purification : Greater than 95.0% as determined by SDS-PAGE and HPLC.
Content : Lyophilized from a 0.2µm filtered concentrated solution in 1xPBS.
Storage condition : Lyophilized LR3 IGF1 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution the LR3 IGF1 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.
Amino Acid : MFPAMPLSSLFVNGPRTL CGAELVDALQFVCGDRGFYFNKPTGYGSSRRAPQTGIV
DECCFRSCDLRRLEMYCAPLKPAKSA.

Application Note

It is recommended to reconstitute the lyophilized LR3 IGF1 in sterile 18M-cm H2O at a concentration of 100µg/ml, which can then be further diluted to other aqueous solutions. The ED50 as determined by the stimulation of protein synthesis in L6 myoblasts is less than 10ng/ml, corresponding to a specific activity of 100,000units/mg.