

IGF1

Recombinant Human LONG[®]R³ IGF-I (Liquid)

Catalog No.	CRH061	Quantity:	5 ml
Alternate Names:	Insulin-like growth factor I, IGF-I, Mechano growth factor, Somatomedin-C		
Description:	<p>LONG[®]R³ IGF-I is an analog of IGF-1 that was developed for use in mammalian serum-free cell culture to promote cell growth, survival, and recombinant protein expression. When supplemented in serum-free medium, it promotes cell proliferation, increases cell survival, and enhances productivity through better proliferative and anti-apoptotic signaling. It has an increased half-life in vitro and in vivo and a low affinity for IGF binding proteins (IGFBP) that make it ideal for both research and large-scale culturing. The protein was created by substituting an arginine (R) for glutamic acid (E) at amino acid 3 and extending the N-terminal end of the peptide by 13 amino acids (MFPAMPLSSLFVN). All cell types that have a growth response to insulin in cell culture have the potential to respond to LONG[®]R³ IGF-I.</p> <p>Recombinant Human LONG[®]R³ IGF-I is a single, non-glycosylated polypeptide chain containing 83 amino acids.</p>		
Concentration:	1.0 mg/ml by RP-HPLC, lot specific		
UniProt ID:	P05019		
Source:	<i>E. coli</i>		
Molecular Weight:	~9.1 kDa as determined by mass spectrometry (9108-9112 Da)		
Formulation:	0.1 M acetic acid		
Purity:	>95% single band by SDS-PAGE with the same electrophoretic mobility as the reference standard.		
Endotoxin Level:	<0.1 EU/μg as determined by LAL assay		
Bioburden:	<p>Total viable aerobic count ≤ 100 CFU/ml</p> <p>Enterobacteriaceae and gram negatives absent in 1 ml</p> <p><i>Pseudomonas aeruginosa</i> absent in 1 ml</p> <p><i>Staphylococcus aureus</i> absent in 1 ml</p>		
Biological Activity:	ED ₅₀ < 10 ng/ml, determined by the stimulation of protein synthesis in L6 myoblasts.		
Amino Acid Sequence:	MFPAMPLSSL FVNGPRTLCLG AELVDALQFV CGDRGFYFNK PTGYGSSSR APQTGIVDEC CFRSCDLRRL EMYCAPLKPA KSA		
Handling:	Ready to use. Open aseptically and add directly to cell culture medium.		
Applications:	Cell culture supplement for use in serum-free media to enhance survival and proliferation of mammalian cells.		
Storage & Stability:	Store at 2-8°C. Stable unopened for 1 year.		
Certification:	<p>LONG[®]R³ IGF-I is manufactured in an ISO 9001 certified facility and based on EU GMP. No animal-derived substances are used either in the raw materials or the direct manufacture of this product. Thus, it is not derived from specified risk material as defined in Commission Decision 2000/418/EC (as amended).</p>		

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.



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