

IGF1

Recombinant Human IGF-1, ¹⁵N Stable Isotope Tag

Catalog No.	CRH019A CRH019B CRH019C	Quantity:	10 µg 50 µg 1.0 mg
Alternate Names:	Insulin-like growth factor 1, IGFI, IGF1		
Description:	<p>The insulin-like growth factors (IGFs) belonged to the insulin gene family, are mitogenic polypeptide growth factors that stimulate the proliferation and survival of various cell types including muscle, bone, and cartilage tissue in vitro. The IGFs are similar by structure and function to insulin, but have a much higher growth-promoting activity than insulin. IGF-1 is produced primarily by the liver as an endocrine hormone as well as in target tissues in a paracrine/autocrine fashion. The production of IGF-1 is stimulated by growth hormone (GH) and can be retarded by undernutrition, growth hormone insensitivity, lack of growth hormone receptors, or failures of the downstream signaling pathway post GH receptor including SHP2 and STAT5B.</p> <p>Recombinant Human IGF-1 ¹⁵N Stable Isotope is a single non-glycosylated polypeptide chain containing 70 amino acids and a ¹⁵N stable isotope label.</p>		
Gene ID:	3479		
UniProt ID:	P05019		
Source:	<i>E.coli</i>		
Molecular Weight:	~7.7 kDa		
Formulation:	Lyophilized from sterile filtered PBS, pH 7.2.		
Purity:	>97% by SDS-PAGE and HPLC analyses.		
Endotoxin Level:	<1 EU/µg		
Biological Activity:	The ED ₅₀ , as determined by a cell proliferation assay (serum free) with human MCF-7 cells, is <2 ng/mL.		
Specific Activity:	>5.0 × 10 ⁵ IU/mg		
Amino Acid Sequence:	GPETLCGAEL VDALQFVCGD RGFYFNKPTG YGSSRRAPQ TGIVDECCFR SCDLRRLEMY CAPLKPAKSA		
Reconstitution:	Centrifuge vial prior to opening. Add sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Further dilutions should be made in appropriate buffered solutions.		
Storage & Stability:	Store as supplied at -20°C to -80°C for up to 1 year. Upon reconstitution, prepare working aliquots and store at -20°C to -80°C. It is recommended that a carrier protein such as 0.1% HSA or BSA is added for long term storage. Avoid repeated freeze-thaw cycles.		

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

