

IGF1

Recombinant Human DES1-3 IGF-1

Catalog No.	CRH018A CRH018B CRH018C	Quantity:	20 µg 100 µg 1 mg
Alternate Names:	Insulin-like growth factor 1, IGF-IA, IGF1, IGF1		
Description:	<p>IGF-1 belonged to the insulin gene family, is a mitogenic polypeptide growth factor that stimulates the proliferation and survival of various cell types including muscle, bone, and cartilage tissue in vitro. DES(1-3) IGF-1 is a truncated variant of human IGF-1 with the tripeptide Gly-Pro-Glu absent from the N-terminus. It has been isolated from bovine colostrum, human brain and porcine uterus. DES(1-3) IGF-1 probably results from post-translational cleavage of IGF-1. It is about 10-fold more potent than IGF-I at stimulating hypertrophy and proliferation of cultured cells, a consequence of much reduced binding to IGF-binding proteins, in turn caused by the absence of the glutamate at position 3. Clinical opportunities for DES(1-3) IGF-1 have not yet been evaluated, but could apply in catabolic states as well as for the treatment of inflammatory bowel diseases.</p> <p>Recombinant Human DES1-3 IGF-1 is a single non-glycosylated polypeptide chain containing 67 amino acids.</p>		
Gene ID:	3479		
Source:	<i>E.coli</i>		
Molecular Weight:	7.4 kDa		
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.		
Purity:	>97% by SDS-PAGE and HPLC analyses.		
Endotoxin Level:	<1 EU/µg as determined by LAL method.		
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using serum free human MCF-7 cells is less than 2 ng/ml.		
Specific Activity:	>5.0 × 10 ⁵ IU/mg.		
Amino Acid Sequence:	TLCGAELVDA LQFVCGDRGF YFNKPTGYGS SSRRAPQTGI VDECCFRSCD LRRLEMYCAP LKPAKSA		
Reconstitution:	Centrifuge vial prior to opening. Add sterile distilled water or aqueous buffer to a concentration of 0.1-1.0 mg/ml. Further dilutions should be made in appropriate buffered solutions.		
Storage & Stability:	The lyophilized protein is stable at 2-8°C. Upon receipt, store desiccated at -20°C. After reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -80°C. For long term storage of reconstituted protein, it is recommended that a carrier protein such as 0.1% BSA or HSA be added. This depends on the particular application. Avoid repeated freeze/thaw cycles.		

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