Recombinant Human IGF1

Cat No:HR2R1518

For research use only

Overview

Quantity	1.0 ?g
Gene Symbol	IGF1
Gene ID	3479
Accession	P01343
Alternative Name	IGF-I, Mechano growth factor, MGF, Somatomedin-C, IBP1 Recombinant Human Insulin Like Growth Factor-I (IGF1)
Species	Human
Source	E. coli
Description	Insulin-like growth factor I, also known as somatomedin C, is the dominant effector of growth hormone and is structurally homologous to proinsulin. Human IGF-I is synthesized as two precursor isoforms with N- and alternate C- terminal propeptides (1). These isoforms are differentially expressed by various tissues (1). The 7.6 kDa mature IGF-I is identical between isoforms and is generated by proteolytic removal of the N- and C- terminal regions. Mature human IGF-I shares 94% and 96% aa sequence identity with mouse and rat IGF-I, respectively (2), and exhibits cross-species activity. It shares 64% aa sequence identity with mature human IGF-II. Circulating IGF-I is produced by hepatocytes, while local IGF-I is produced by many other tissues in which it has paracrine effects.
Functions	The ED(50) was determined by a cell proliferation assay using FDC-P1 cells is ? 1.0 ng/mL, corresponding to a specific activity of ? 1.0 x 10^6 units/mg.
Formulation	Recombinant Human IGF1 was lyophilized from a 0.2 ?m filtered PBS solution, pH 7.4.
Solubility	A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.
Appearance	Lyophilized Powder
Molecular Weight	8
Purity	>95% as determined by SDS-PAGE
Concentration	<1.0 EU/?g of recombinant protein as determined by the LAL method.
Shipping Condition	Ambient Temperature
Storage Condition	The lyophilized protein is stable for at least one year from date of receipt at -70?C. Upon reconstitution, this cytokine can be stored in working aliquots at 2? - 8?C for one month, or at -20?C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.