Recombinant Human IGF1

Cat No:HR2R1517

For research use only

Overview

Quantity	100 ?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	The Insulin Growth Factors belong to the Insulin gene family, the prototypic members of which include insulin and relaxin. Also known as somatomedin C, IGF1 is known to stimulate the proliferation of a wide range of cells including muscle, bone, and those of the cartilage tissue. A dominant effector of the growth hormone, mature IGF1 is generated by proteolytic removal of the N- and C- terminal pro-peptide regions. Mature human IGF1 shares 94% and 96% amino acid sequence identity with mouse and rat IGF1, respectively, while exhibiting cross-species activity. Circulating IGF1 is produced by hepatocytes while local IGF1 is produced by various other tissues in which it exerts paracrine effects. Recombinant Human IGF1 is a globular, 7.7 kDa protein that contains 3 native intra-molecular disulfide bonds.
Functions	The ED50 as determined by a cell proliferation assay using MCF-7 cells was found to be ?20 ng/ml
Formulation	Lyophilized from a 0.2 ?m filtered solution in sodium phosphate (pH 6.5) and 150mM NaCl
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	7.7
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.