Recombinant Mouse IGF1

Cat No:HR2R2139

For research use only

Overview

Quantity	20 ?g
Gene Symbol	IGF1
Gene ID	N/A
Accession	P05017
Alternative Name	IGF-I, Mechano growth factor, MGF, Somatomedin-C, IBP1, Recombinant Mouse Insulin Like Growth Factor-I (IGF1)
Species	Mouse
Source	E. coli
Description	The Insulin Like Growth Factors, or somatomedins, belong to the Insulin gene family, members of which are insulin and relaxin. The IGFs play similar a similar role to insulin with regards to the regulation of glucose uptake and glycogen metabolism. Additionally IGF1 plays an essential role in mediating many of the effects of growth hormone. IGFs are produced first as inactive precursors, and undergo proteolysis to become active. Circulating IGF1 is produced by hepatocytes whereas local IGF1 is produced in a variety of other tissues where it exhibits paracrine effects. Mouse IGF1 shares 94% and 98% amino acid sequence identity with human and rat IGF1 respectively. Recombinant Mouse IGF1 is a globular, 7.9 kDa protein which contains 3 native disulfide bonds.
Functions	The ED50 of Recombinant Mouse IGF1 as found by dose dependent proliferation of mouse 3T3 cells was found to be <0.1 ng/ml.
Formulation	Lyophilized from a 0.2 micron filtered solution in Phosphate buffer and NaCl
Solubility	A quick spin of the vial followed by reconstitution in sterile distilled water to a concentration not less than 0.1 mg/mL.
Appearance	Lyophilized Powder
Molecular Weight	7.9
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.