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Mouse IGF-1 Recombinant Protein

Catalog Number: 14-8508
Also Known As:Insulin-like Growth Factor 1, IGF-I
RUO: For Research Use Only

Product Information

Contents: Mouse IGF-1 Recombinant Protein
REF Catalog Number: 14-8508
Handling Conditions: For best recovery, quick-spin vial prior to opening. Use in a sterile environment
Source: *E. coli*-expressed amino acids Gly33 – Ala102 (Accession# NP001104746)
Molecular Mass: 7.6 kDa
Purity: Greater than 98%, as determined by SDS-PAGE
Endotoxin Level: Less than 0.01 ng/ug cytokine as determined by the LAL assay.
Bioactivity: The ED_{50}, measured by the dose-dependent induction of FDC-P1 cell proliferation is typically 2 ng/ml, corresponding to a specific activity of approximately 5 $x10^5$ Units/mg.

Formulation: Sterile liquid; phosphate buffered saline, pH 7.2, 1.0% BSA. 0.22 µm filtered.
Temperature Limitation: Store at less than or equal to -70°C.
LOT Batch Code: Refer to Vial
Use By: Refer to Vial

Description

Insulin-like growth factor I (IGF-1), also known as somatomedin C, is a member of the insulin-like growth factor family. This protein is expressed in many cell types and is secreted into the blood. Metabolism of glucose, fatty acids, cartilage and bone, as well as growth hormone activity, are all regulated by IGF-1. This protein also plays important roles in Alzheimer's disease and tumor pathogenesis. IGF-1 and IGF-2 share 70% sequence identity. Furthermore, mature mouse IGF–1 shares 94% and 99% amino acid sequence identity with human and rat IGF–1, respectively, and exhibits cross-species activity. Recombinant mouse IGF-1 produced in *E.coli* is a single, non-glycosylated, polypeptide containing 70 amino acids.

Applications Reported

Recombinant mouse IGF-1 is biologically active and can promote proliferation of FDC-P1 cells in culture.

Applications Tested

This reagent has been tested in bioassays using the FDC-P1 cell line. The ED_{50}, measured by the dose-dependent induction of FDC-P1 cell proliferation is typically 2 ng/ml, corresponding to a specific activity of approximately 5 $x10^5$ Units/mg.

References

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Related Products

14-8505 Human IGF-2 Recombinant Protein

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