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Recombinant Murine IGF-I
Catalog # PBG10178

Specification

Recombinant Murine IGF-I - Product Information

Recombinant Murine IGF-I - Additional Information

Description
The IGFs are mitogenic polypeptide growth factors that stimulate the proliferation and survival of various cell types including muscle, bone, and cartilage tissue in vitro. IGFs are predominantly produced by the liver, although a variety of tissues produce the IGFs at distinctive times. The IGFs belong to the Insulin gene family, which also contains insulin and relaxin. The IGFs are similar by structure and function to insulin, but have a much higher growth-promoting activity than insulin. IGF-II expression is influenced by placenta lactogen, while IGF-I expression is regulated by growth hormone. Both IGF-I and IGF-II signal through the tyrosine kinase type I receptor (IGF-IR), but, IGF-II can also signal through the IGF-II/Mannose-6-phosphate receptor. Mature IGFs are generated by proteolytic processing of inactive precursor proteins, which contain N-terminal and C-terminal propeptide regions. Recombinant murine IGF-I is a 7.6 kDa globular protein containing amino acids including 3 intra-molecular disulfide bonds.

BiologicalActivity
The ED₅₀ was determined a cell proliferation assay using FDC-P1 cells is ≤ 2.0 ng/ml, corresponding to a specific activity of ≥ 5 x 10⁵ units/mg.

Authenticity
Verified by N-terminal and Mass Spectrometry analyses (when applicable).

Endotoxin
Endotoxin level is <0.1 ng/ µg of protein (<1EU/ µg).

Protein Content
Verified by UV Spectroscopy and/or SDS-PAGE gel.

Storage
-20°C

Precautions
Recombinant Murine IGF-I is for research use only and not for use in diagnostic or therapeutic procedures.

Recombinant Murine IGF-I - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides

- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Recombinant Murine IGF-I - Images