

32-20186: Recombinant Murine IGF-I(Discontinued)

Reactivity : Human, Mouse, Rat

Alternative Name : Insulin-like Growth Factor-I, Somatamedin C, IGF-IA

Description

Source: E.coli 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 to insulin by structure and function, 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.

Product Info

Amount : 10 µg / 50 µg

Purification : Purity: $\geq 98\%$ by SDS-PAGE gel and HPLC analyses.

Content : This recombinant protein is supplied in lyophilized form.

Amino Acid : GPETLCGAEL VDALQFVCGP RGFYFNKPTG YGSSIRRAPQ TGIVDECCFR SCDLRRLEMY CAPLKPTKAA

Application Note

The ED_{50} was determined a cell proliferation assay using FDC-P1 cells is ≤ 2.0 ng/ml, corresponding to a specific activity of $\geq 5 \times 10^5$ units/mg.