

**RECOMBINANT MOUSE INSULIN-LIKE GROWTH FACTOR-1 (mIGF-1)**

**Catalog # 02742**

**50 mg per vial**

**PRODUCT DESCRIPTION:**

Insulin-like growth factor-1 (IGF-1) is structurally homologous to proinsulin. IGF-1 is produced by several cell types and may have autocrine, paracrine and endocrine functions. IGF-1 is a potent mitogen that mediates the growth-promoting activities of growth hormone postnatally. It also plays a role during embryonic growth and differentiation. Recombinant mouse IGF-1 is a 7.6 kDa protein containing 70 amino acid residues. IGF-1 receptor is a disulfide-linked heterotetrameric transmembrane glycoprotein with an intracellular tyrosine kinase domain.

**SOURCE:**

A DNA sequence encoding the mature IGF-1 protein was expressed in *E. coli*.

**PURITY:**

Greater than 97%, as determined by SDS-PAGE and visualized by silver stain. Endotoxin level is less than 0.1 ng per µg of the cytokine as determined by the LAL method.

**FORMULATION:**

Lyophilized from a 0.2 µm filtered solution in PBS.

**RECONSTITUTION:**

It is recommended that sterile PBS containing at least 0.1% human serum albumin or bovine serum albumin be added to the vial to prepare a stock solution of no less than 25 µg/mL of the cytokine.

**STABILITY/STORAGE:**

Lyophilized samples are stable for greater than six months at -20°C to -70°C.

Upon reconstitution, mouse IGF-1 can be stored under sterile conditions at 2° - 4°C for one month or at -20°C to -70°C for three months without detectable loss of activity.

**Avoid repeated freeze-thaw cycles.**

**ACTIVITY:**

Activity was measured in a serum-free cell proliferation assay using the human cell line MCF-7 and the ED<sub>50</sub> was typically 1.0-3.0 ng/ml.

**THIS REAGENT IS FOR RESEARCH USE ONLY.  
IT IS NOT TO BE ADMINISTERED TO HUMANS.**