RECOMBINANT HUMAN INSULIN-LIKE GROWTH FACTOR-2 (hIGF-2)

Catalog # 02636

50 ng per vial

PRODUCT DESCRIPTION:

Insulin-like growth factor II (IGF-2) and IGF-I are family members of insulin-like growth factors that are structurally homologous to proinsulin, and share approximately 70% sequence identity. IGF-2 is expressed in many tissues and autocrine, paracrine and endocrine functions have been reported. Mature IGF-2 is highly conserved and has cross-species reactivity. Two specific cell surface receptors, type I IGF and type II IGF receptors, that bind IGF-1 and IGF-2 have been identified. Recombinant human IGF-2 contains 67 amino acids and has a predicted molecular mass of approximately 7.5 kDa.

SOURCE:

A DNA sequence encoding the mature IGF-2 protein was expressed in E. coli.

PURITY:

Greater than 97%, as determined by SDS-PAGE and visualized by silver stain. Endotoxin level less than 0.1 ng per 1 μ g of the cytokine as determined by the LAL method.

FORMULATION:

Lyophilized from a $0.2 \,\mu m$ filtered solution in 0.1 M acetic acid.

RECONSTITUTION:

It is recommended that 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 $10 \,\mu\text{g/mL}$ of the cytokine.

STABILITY/STORAGE:

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

Reconstituted hIGF-2 can be stored under sterile conditions at 2°C to 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 determined in a serum-free cell proliferation assay using the human cell line MCF-7 and the ED_{50} for this effect was typically 5.0 - 10.0 ng/mL.

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