

RECOMBINANT MOUSE IL-11

Catalog # 02711 5 mg per vial
Catalog # 02911 25 mg per vial

PRODUCT DESCRIPTION:

Interleukin 11 (IL-11) is a pleiotropic cytokine produced by IL-1 stimulated fibroblasts and bone marrow stromal cell lines. IL-11 is a growth factor for plasmacytomas, hematopoietic multipotential and committed megakaryocytic and macrophage progenitor cells, and inhibits adipogenesis in mouse pre-adipocytes. *In vitro*, IL-11 can synergize with IL-3, IL-4 and SCF to shorten the G₀ period of early hematopoietic progenitors. It also enhances the IL-3-dependent megakaryocyte colony formation, and stimulates T cell dependent development of specific Ig-secreting B cells. IL-11 binds to a heterodimeric receptor formed by IL-11R α and gp130. Mouse IL-11 cDNA encodes a 199 amino acid residue precursor polypeptide with a 22 amino acid residue signal peptide. Recombinant mouse IL-11 contains 178 amino acid residues and has a predicted molecular mass of 19 kDa.

SOURCE:

A DNA encoding the mature mouse IL-11 protein sequence 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 μ g of the cytokine as determined by the LAL method.

FORMULATION:

Lyophilized from a 0.2 μ m filtered solution in 40% CH₃CN, 0.1% TFA, containing 50 μ g of bovine serum albumin per 1 μ g of cytokine.

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 5 μ g/mL of the cytokine.

STABILITY/STORAGE:

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

Upon reconstitution, this cytokine 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 cell proliferation assay using a factor dependent mouse plasmacytoma cell line,

T1165.85.2.1 that has been adapted to grow in IL-11, and the ED₅₀ for this effect was typically 0.05 – 0.15 ng/mL.

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