

RECOMBINANT MOUSE INTERLEUKIN-2 (mIL-2)

Catalog # 02702

20 mg per vial

Catalog # 02902

100 mg per vial

PRODUCT DESCRIPTION:

Interleukin 2 (IL-2) is produced by activated T cells. IL-2 was first described as a T cell growth factor. It is now known to stimulate growth and differentiation of B cells, natural killer (NK) cells, lymphocyte activated killer (LAK) cells, monocytes/macrophages and oligodendrocytes. Mouse IL-2 is species-specific and is inactive on human cells.

The biological activity of IL-2 is mediated by the binding to a cell surface receptor. The functional high-affinity receptor of IL-2 is composed of three distinct polypeptide chains, the IL-2 receptor α , β and γ subunits. The intermediate-affinity IL-2 receptor complex, which lacks the α subunit, but contains both the β and γ subunits, is also capable of transducing the IL-2 signal. The γ chain of the IL-2 receptor complex has been shown to be a subunit of the receptor complexes of IL-4, IL-7, IL-9 and IL-15. Biological activity of IL-2 is mediated by JAK1 and JAK3-induced activation of STAT3 and STAT5. Recombinant mouse IL-2, containing a mixture of the 149 amino acid residue protein and the 150 amino acid residue N-methionyl form, has a predicted molecular mass of approximately 17.2 kDa.

SOURCE:

A DNA sequence encoding the mature mouse IL-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 sterile filtered solution in 50 mM ammonium acetate and 1 mM DTT, pH 4.0, containing 50 μ g of bovine serum albumin per 1 μ g of cytokine.

RECONSTITUTION:

It is recommended that sterile phosphate-buffered saline 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 μ g/mL.

STABILITY/STORAGE:

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

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

Avoid repeated freeze-thaw cycles.

ACTIVITY:

Activity was determined in a cell proliferation assay using an IL-2-dependent mouse cytotoxic T-cell line, CTLL-2 and the ED₅₀ for this effect was typically 0.1 - 0.4 ng/mL.

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