



**Recombinant Human Interleukin 4 Catalog Number:** SJB02

**Strength:** 10µg, 30µg, 100µg

**Specifications and Use**

**Description:** Recombinant human IL-4 produced in Yeast is a single, glycosylated, polypeptide chain containing 129 amino acids, three pairs of disulfide bonds and having a molecular mass of approximately 15.0kD (after glycosylation, the molecular mass is 30.0kD.)

**Source:** Yeast.

**Molecular Mass :** Approximately 30.0kD.

**Purity :** ≥97%, as determined by SDS-PAGE and HPLC method.

**Endotoxin Level :** ≤1EU/µg, determined by the LAL method.

**Biological Activity :** Measured in a cell proliferation assay using a human factor-dependent cell line, TF-1. The specific activity shall be not less than 1×10<sup>7</sup>IU/mg.

**Formulation :** Lyophilized from a 0.2µm filtered solution in 20mM Phosphate Buffer.

**Reconstitution :** It is recommended that sterile ddH<sub>2</sub>O containing at least 0.1% human serum albumin or bovine serum albumin be added to the vial to prepare a stock solution of not less than 50µg/ml of the cytokine.

**Storage :** Lyophilized samples are stable for greater than six months from date of receipt at -20°C to -70°C.

■ Upon reconstitution, this cytokine can be stored under sterile conditions at 2-8° for one month or at -20° to -70°C in a manual defrost freezer for three months without detectable loss of activity.

■ Avoid repeated freeze-thaw cycles.

**Human Interleukin 4**

Interleukin 4 is a pleiotropic cytokine produced by activated T cells, mast cells, and basophils. It was initially identified as a B cell differentiation factor (BCDF), as well as a B cell stimulatory factor (BSF1). Subsequent to the molecular cloning and expression of both human and Mouse IL-4, numerous other functions have been described on B cells as well as other hematopoietic and nonhematopoietic cells, including T lymphocytes, monocytes, macrophages, mast cells, myeloid and erythroid progenitors, fibroblasts, endothelial cells, etc. IL-4 exhibits anti-tumor effects both in vivo and in vitro.