



SHANGHAI GENOMICS

Recombinant Murine Interleukin 4

rmIL-4

Catalog number: SG3310-02

Specifications and Use

- Source** ● *E.coli*
- Molecular Mass** ● 13.5kDa.
- Purity** ● > 95%, as determined by SDS-PAGE method.
- Biological Activity** ● The ED50 was determined by the dose-dependent proliferation of murine HT-2 cells is < 2.0ng/ml, corresponding to a specific activity of > 5 x 10⁵ units/mg.
- Endotoxin Level** ● Less than 1EU/μg of rmIL-4 as determined by LAL method.
- Formulation** ● Sterile filtered lyophilized (freeze-dried) powder
- Solubility** ● It is recommended to reconstitute the lyophilized rmIL-4 in sterile ddH₂O containing at least 0.1% human serum albumin or bovine serum albumin to prepare a stock solution of no less than 5μg/ml of the cytokine.
- Stability** ● Lyophilized protein is stable for a few weeks at room temperature, but best stored at -20 °C .
● Reconstituted murine IL-4 should be stored in working aliquots at -20 °C .
● Avoid repeated freeze-thaw cycles.
- Usage** ● FOR RESEARCH USE ONLY. NOT FOR HUMAN USE.

Murine Interleukin 4

IL-4 is a pleiotropic cytokine that regulates diverse T and B cell responses including cell proliferation, survival and gene expression. Produced by mast cells, T cells and bone marrow stromal cells, IL-4 regulates the differentiation of naive CD4⁺ T cells into helper Th2 cells, characterized by their cytokine-secretion profile that includes secretion of IL-4, IL-5, IL-6, IL-10, and IL-13, which favor a humoral immune response. Another dominant function of IL-4 is the regulation of immunoglobulin class switching to the IgG1 and IgE isotypes. Excessive IL-4 production by Th2 cells has been associated with elevated IgE production and allergy. Recombinant murine IL-4 is a 13.5kDa globular protein containing 120 amino acid residues.