



Recombinant Murine Interleukin 4

rmIL-4

Catalog number: HZ-6512

Lot: CHI-121407

Specifications and Use

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| Source | <ul style="list-style-type: none">● <i>E.coli</i> |
| Molecular Mass | <ul style="list-style-type: none">● 13.5kDa. |
| Purity | <ul style="list-style-type: none">● > 95%, as determined by SDS-PAGE method. |
| Biological Activity | <ul style="list-style-type: none">● 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 | <ul style="list-style-type: none">● Less than 1EU/μg of rmIL-4 as determined by LAL method. |
| Formulation | <ul style="list-style-type: none">● Sterile filtered lyophilized (freeze-dried) powder |
| Solubility | <ul style="list-style-type: none">● 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 | <ul style="list-style-type: none">● Lyophilized samples are stable for greater than six months from date of receipt at -20°C to -70°C.● Reconstituted murine IL-4 should be stored in working aliquots at -20°C.● Avoid repeated freeze-thaw cycles. |
| Usage | <ul style="list-style-type: none">● 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.