

#### **Recombinant Rat IL-4**

Catalog # PBG10237

# Specification

### **Recombinant Rat IL-4 - Product Information**

# **Recombinant Rat IL-4 - Additional Information**

## **Description**

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 rat IL-4 is a 14.0 kDa globular protein containing 126 amino acid residues.

# **Biological**Activity

Tested by its ability to suppress LPS-induced TNF- $\alpha$  and MIP-2 production in M splenocytes.

#### **Authenticity**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

### **Endotoxin**

Endotoxin level is  $<0.1 \text{ ng}/\mu\text{g}$  of protein ( $<1\text{EU}/\mu\text{g}$ ).

## **Protein Content**

Verified by UV Spectroscopy and/or SDS-PAGE gel.

## **Storage**

-20°C

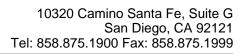
#### **Precautions**

Recombinant Rat IL-4 is for research use only and not for use in diagnostic or therapeutic procedures.

### Recombinant Rat IL-4 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety





• <u>Cell Culture</u> Recombinant Rat IL-4 - Images