



# Recombinant Human IL-4 (Mammalian)

<b>Catalog #</b>	EPT058
<b>Expression Host</b>	Human Cells
<b>DESCRIPTION</b>	Recombinant Human Interleukin-4 is produced by our Mammalian expression system and the target gene encoding His25-Ser153 is expressed.
<b>Accession</b>	P05112
<b>Synonyms</b>	Interleukin-4; IL-4; B-Cell Stimulatory Factor 1; BSF-1; Binetrakin; Lymphocyte Stimulatory Factor 1; Pitrakinra; IL4
<b>Mol Mass</b>	14.97 KDa
<b>AP Mol Mass</b>	18 KDa, reducing conditions
<b>Purity</b>	Greater than 95% as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	Less than 0.001 ng/μg (0.01 EU/μg) as determined by LAL test.
<b>FORMULATION</b>	Lyophilized from a 0.2 μm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.





## RECONSTITUTION

Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

It is not recommended to reconstitute to a concentration less than 100 $\mu$ g/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

## SHIPPING

The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

## STORAGE

Lyophilized protein should be stored at  $< -20^{\circ}\text{C}$ , though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at  $4-7^{\circ}\text{C}$  for 2-7 days.

Aliquots of reconstituted samples are stable at  $< -20^{\circ}\text{C}$  for 3 months.

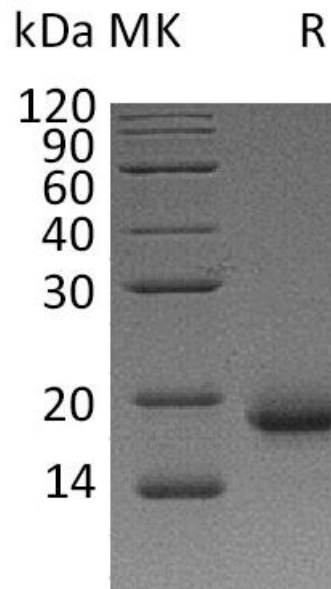
## BACKGROUND

Interleukin-4 (IL-4) is a pleiotropic cytokine that regulates diverse T and B cell responses including cell proliferation, survival and gene expression. IL-4 is produced by mast cells, T cells, and bone marrow stromal cells. IL-4 regulates the differentiation of naive CD4<sup>+</sup> 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 allergic response.



**SDS-PAGE**

