



## Rat Interleukin 4 (DAG359)

This product is for research use only and is not intended for diagnostic use.

### PRODUCT INFORMATION

<b>Product Overview</b>	IL4 is a potent lymphoid cell growth factor which stimulates the growth and survivability of certain B cells and T cells. Rat IL4 which was expressed in <i>E. coli</i> is a 14kDa protein containing 121 amino acid residues.
<b>Antigen Description</b>	Interleukin-4, abbreviated IL-4, is a cytokine that induces differentiation of naive helper T cells (Th0 cells) to Th2 cells. Upon activation by IL-4, Th2 cells subsequently produce additional IL-4. The cell that initially produces IL-4, thus inducing Th0 differentiation, has not been identified, but recent studies suggest that basophils may be the effector cell. It is closely related and has functions similar to Interleukin 13.
<b>Species</b>	Rat
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	The ED <sub>50</sub> as determined by the dose-dependent stimulation of the proliferation of conA-activated rat spleen cells was found to be about 1.5 ng/ml, corresponding to a specific activity of about 6.6 x 10 <sup>6</sup> units/mg. Each laboratory should determine an optimum concentration.
<b>Format</b>	Purified, Lyophilized. We recommend a quick spin followed by reconstitution in water to a concentration of 0.1-1.0 mg/ml. This solution can then be diluted into other aqueous buffers and stored at 2-8°C for up to one week or -20°C for future use.
<b>Concentration</b>	Not applicable.
<b>Buffer</b>	Not applicable.
<b>Preservative</b>	None
<b>Storage</b>	2-8°C short term, -20°C long term

### BACKGROUND

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<b>Introduction</b>	Participates in at least several B-cell activation processes as well as of other cell types. It is a costimulator of DNA-synthesis. It induces the expression of class II MHC molecules on resting B-cells. It enhances both secretion and cell surface expression of IgE and IgG1. It also regulates the expression of the low affinity Fc receptor for IgE (CD23) on both lymphocytes and monocytes.
<b>Keywords</b>	IL4; interleukin 4; interleukin-4; B cell growth factor 1; B_cell stimulatory factor 1; BCGF 1; BCGF1; BSF1; IL 4; lymphocyte stimulatory factor 1; MGC79402; binetrakin; pitrakinra; IL-4; BSF-1; BCGF-1;

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