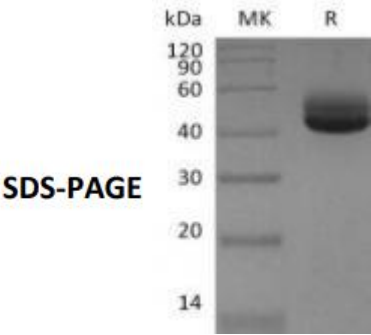


## Recombinant Human IL-4

Catalog#:P01499 Derived from Human Cells

<b>DESCRIPTION</b>	<p>Recombinant Human Interleukin-4 is produced by our Mammalian expression system and the target gene encoding His25-Ser153 is expressed with a Fc tag at the C-terminus.</p> <p><b>Accession#:</b> P05112</p> <p><b>Known as:</b> Interleukin-4; IL-4; B-Cell Stimulatory Factor 1; BSF-1; Binetrakin; Lymphocyte Stimulatory Factor 1; Pitrakinra; IL4</p>
<b>FORMULATION</b>	Lyophilized from a 0.2 $\mu$ m filtered solution of PBS, pH 7.4.
<b>SHIPPING</b>	<p>The product is shipped at ambient temperature.</p> <p>Upon receipt, store it immediately at the temperature listed below.</p>
<b>STORAGE</b>	<p>Lyophilized protein should be stored at <math>&lt;-20^{\circ}\text{C}</math>, though stable at room temperature for 3 weeks.</p> <p>Reconstituted protein solution can be stored at <math>4-7^{\circ}\text{C}</math> for 2-7 days.</p> <p>Aliquots of reconstituted samples are stable at <math>&lt;-20^{\circ}\text{C}</math> for 3 months.</p>
<b>RECONSTITUTION</b>	<p><i>Always centrifuge tubes before opening. Do not mix by vortex or pipetting.</i></p> <p><i>It is not recommended to reconstitute to a concentration less than <math>100\mu\text{g/ml}</math>.</i></p> <p>Dissolve the lyophilized protein in distilled water.</p> <p>Please aliquot the reconstituted solution to minimize freeze-thaw cycles.</p>
<b>QUALITY CONTROL</b>	<p><b>Mol Mass:</b>41.9kDa <b>AP Mol Mass:</b>40-55kDa, reducing conditions.</p> <p><b>Purity:</b> Greater than 95% as determined by reducing SDS-PAGE.</p> <p><b>Endotoxin:</b> Less than 0.1 ng/<math>\mu\text{g}</math> (1 EU/<math>\mu\text{g}</math>) as determined by LAL test.</p>
<b>BACKGROUND</b>	<p>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.</p>
	 <p>SDS-PAGE</p> <p>kDa MK R</p> <p>120 90 60 40 30 20 14</p>