

## Recombinant Human IL-4 (Mammalian)

Catalog No : PMK2106

**Known As:** Interleukin-4; IL-4; B-Cell Stimulatory Factor 1; BSF-1; Binetrakin; Lymphocyte Stimulatory Factor 1; Pitakinra; IL4

### PROPERTIES

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
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| Description        | Recombinant Human Interleukin-4 is produced by our Mammalian expression system and the target gene encoding His25-Ser153 is expressed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Accession          | P05112                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Formulation        | Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Size               | 10µg/50µg/500µg/1mg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Purity             | > 95%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Endotoxin          | < 0.01 EU/µg as determined by LAL test.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Predicted Mol Mass | 14.97 KDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Apparent Mol Mass  | 18 KDa, reducing conditions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Reconstitution     | Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/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°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at ≤ -20°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. |

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