

Recombinant Human Interleukin-4/IL-4 Protein

Catalog Number: PKSH033456

Note: Centrifuge before opening to ensure complete recovery of vial contents.

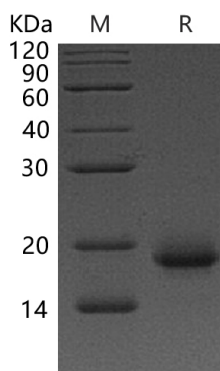
Description

| | |
|---------------------|---|
| Species | Human |
| Source | HEK293 Cells-derived Human Interleukin-4/IL-4 protein His25-Ser153 |
| Mol_Mass | 15.0 kDa |
| Accession | P05112 |
| Bio-activity | Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is 0.01-0.05 ng/ml. |

Properties

| | |
|-----------------------|--|
| Purity | > 95 % as determined by reducing SDS-PAGE. |
| Endotoxin | < 0.01 EU per µg of the protein as determined by the LAL method. |
| Storage | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. |
| Shipping | This product is provided as lyophilized powder which is shipped with ice packs. |
| Formulation | Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. |
| | Please refer to the specific buffer information in the printed manual. |
| Reconstitution | Please refer to the printed manual for detailed information. |

Data



> 95 % as determined by reducing SDS-PAGE.

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⁺ 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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