

Recombinant Human IL-4

Cat# HCT-I4

Product Specifications

- Expression of Human Proteins in Human Cells
- Extreme low Endotoxin
- High Purity
- Animal Free and Xeno Free
- Tag Free

Source: Human cells derived

Structure: Glycosylated monomer

Purity: >95% by SDS-PAGE

Endotoxin Level: <0.5EU/ug

Molecular Weight: 14-19kDa

Formulation: Lyophilized from a 0.2µm filtered solution in PBS without carrier protein

Activity Assay

The activity was measured by its ability to stimulate the proliferation of human TF-1 cells (human erythroleukemic indicator cell line).

Reconstitution

Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein in sterile PBS containing 0.1% endotoxin-free recombinant human serum albumin.

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles. In general: 12 months from

date of receipt, -20 to -80°C as supplied. 1 month, 2 to 8°C under sterile conditions after reconstitution. 3 months, -20 to -80°C under sterile conditions after reconstitution.

Protein Description

Interleukin 4 (IL-4) is a 14-19kDa glycosylated monomer, belongs to the IL-4 / IL-13 family. IL-4 is primarily expressed by Th2 biased CD4+ T cells, mast cells, basophils, and eosinophils. IL-4 is a pleiotropic cytokine that participates in at least several B-cell activation processes as well as of other cell types. It is a co-stimulator 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.

References

- Benczik M, et al. (2004) *Immunol. Invest.* 33,109.
Yokota T, et al. (1986) *Proc. Natl. Acad. Sci.* 83, 5894-5898.
Nishikubo K, et al. (2003) *Gene Ther.* 10 (26), 2119-25.