

Recombinant Human IL-4

Cat. #: SI4-010

Product Specifications

- Expression of Human Proteins in Human Cells
- Extremely Low Endotoxin Level
- High Purity
- Animal Free and Xeno Free
- Tag Free

Protein Description

Interleukin 4 (IL-4) is a 14-19 kDa 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), 2119-2125.

Source: Derived from human cells

Size: 10 µg

Shipping: Ambient temperature

Structure: Glycosylated monomer

Purity: >95% by SDS-PAGE

Endotoxin Level: <0.5 EU/µg

Molecular Weight: 14-19 kDa

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

Activity Assay

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 and 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.

