


CA1063	HumanKine™ IL-4			
	Prod. No. S2321-10UG	lot #: PR1XXXXXX XXXX	Orders & Support	866 372-7442 support@primorigen.com
	<i>For Research Use Only Not intended for use in humans or animals</i>		Web	www.primorigen.com

Pack Size	10 µg
Species	Human
Expression System	HEK 293*
	Animal-derived product free
Molecular Mass	14-19 kDa monomer, glycosylated
Activity	Typically 0.1 to 0.5 ng/mL
Purity	≥ 95%
Endotoxin	≤ 1 EU/µg

Background:

Recombinant human IL-4 expressed in engineered human cells. IL-4 is a 14 to 19 kDa glycosylated monomer and belongs to the IL -4/IL-13 protein family. IL-4 is produced by a number of hematopoietic cell types such as Th2, NK-T, CD3+, as well as basophils, eosinophils, and mast cells. Human IL-4 is important in several B-cell and T-cell activation pathways such as differentiation and proliferation. IL-4 aids antigen presentation on B cells by increasing expression of class II MHC and is implicated in isotype switching of immunoglobulins. Secretion and cell surface expression of IgE and IgG1 on B-cells is enhanced by IL-4. IL-4 inhibits the production of inflammatory cytokines such as TNF-alpha, and IL-1 and prevents the growth of some cancers.

Formulation:

Lyophilized in PBS.

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.

Storage and Stability:

Lyophilized products are stable for one year at -20°C to -80°C from date of receipt. Store only at -20°C to -80°C in working aliquots. Avoid repeated freeze-thaw cycles.

Quality Control Testing

Assay:

The specific activity was determined by dose-dependent simulation of the proliferation of human TF-1 cells (human erythroleukemic indicator cell line).

Purity Confirmation:

The protein was resolved by SDS-polyacrylamide gel electrophoresis and the gel was stained with Coomassie blue.

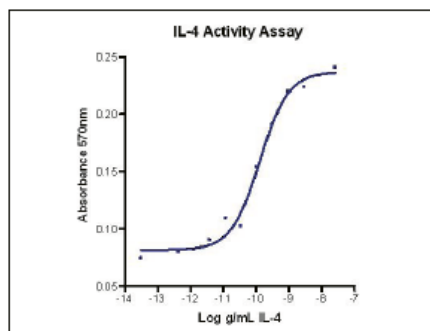
References:

Solari, R., et al (1989) Biochem. J. 262, 897-908
Kitamura, T., et al (1989) J. Cell Physiol. 140, 323-334

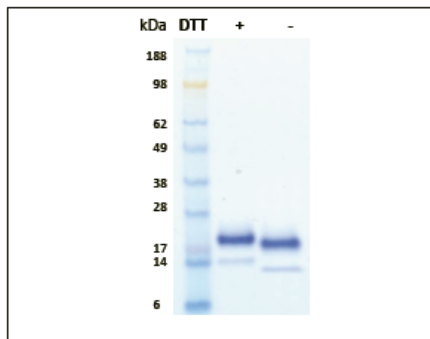
*All HumanKine™ cytokines are expressed in HEK 293 cells.
HumanKine™ is a trademark of HumanZyme Inc.

Note: Representative data are shown below (not Lot-specific).

A. Activity Assay



B. SDS-PAGE



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