

## Recombinant Equine Interleukin-4 (req IL-4)

**Synonyms:** MCGF (Mast cell growth factor), Multi-CSF, P-cell stimulation factor

**Introduction:** req IL-4 is a potent growth promoting cytokine. This cytokine is a species specific colony stimulating factor which stimulates colony formation of megakaryocytes, neutrophils, and macrophages from bone marrow cultures. Produced by T cells, mast cells and eosinophils, IL-4 enhances thrombopoiesis, phagocytosis and antibody-mediated cellular cytotoxicity. Its ability to activate monocytes suggests that IL-4 may have additional immunoregulatory roles. Many of the IL-4 activities depend upon co-stimulation with other cytokines. It is involved in a variety of cell activities such as cell growth, differentiation and apoptosis. IL-4 has been also shown to possess neurotrophic activity and may be associated with neurologic disorders.

**Description:** Recombinant equine IL-4 produced in *E.Coli* is a single, non-glycosylated polypeptide chain containing 114 amino acids and having a molecular mass of 12,8 kDa. The req IL-4 is purified by proprietary chromatographic techniques.

**Source:** *Escherichia Coli*.

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation:** Lyophilised from a 0.2 µm filtered solution in 25 mM sodium phosphate pH 7.4, containing 200mM NaCl.

**Solubility:** It is recommended to reconstitute the lyophilized req IL-4 in sterile H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized req IL-4 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution req IL-4 should be stored at 4° C between 2-7 days and for future use below -18° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Purity:** Greater than 95.0% as determined by SDS-PAGE Silver Stained gel

**Amino acid sequence:**

MCKYDITLQEIHKTLNLLTDGKGNKSCMELTVADAFAGPKNTDGKEICRAAKVLQQLYKRHDRSLIKECLSGGLDR  
NLKGMANGTCCTVNEAKKSTLKDFLERLKTIMKEKYSKC\*

**Biological Activity:** biologically active

**Endotoxicity:** The endotoxin level is less than 1ng /µg (IEU/µg) determined by LAL method

This material is offered for **research use only**. Not for use in human. For *in vitro* use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	2 µg	Cat.N°	18340042
<i>medium</i>	10 µg	Cat.N°	18340043
<i>large</i>	50 µg	Cat.N°	18340045
<i>x-large</i>	250 µg	Cat.N°	18340037

**ImmunoTools** Excellent Quality - Advantageously priced

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