

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 thrombopoieses, 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 H₂O 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:

MCKYDITLQEIIKTLNNLTDGKGNKSCMELTVADAFAGPKNTDGKEICRAAKVLQQLYKRHDRSLIKECLSGGLDR
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 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

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