

IL-15

Interleukin 15

murine, recombinant, *E. coli*

Cat. No.	Amount
PR-473	10 µg

For *in vitro* use only
Quality guaranteed for 12 months
Store at -20°C

Avoid freeze / thaw cycles

Form

Lyophilized. IL-15 was lyophilized from a 1 mg/ml solution with 10 mM Tris-HCL pH 8.0.

Solubility

It is recommended to reconstitute the lyophilized IL-15 in bidest H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Activity

ED₅₀: < 5 ng/ml, corresponding to a specific activity 2 x 10⁵ IU/mg, determined by the dose-dependent stimulation of the proliferation of CTL-2 cells.

Molecular Weight

13 kDa

Purity

≥ 95% by SDS-PAGE and RP-HPLC

Description

Interleukin (IL)-15 is a pleiotropic pro-inflammatory cytokine that is expressed in several inflammatory disorders, including rheumatoid arthritis, psoriasis, and pulmonary inflammatory diseases. IL-15 promotes activation of T-cells, neutrophils, and macrophages, and is critical to dendritic cell function in several model systems. Recent emerging data suggest that IL-15 may serve as a useful therapeutic target across a range of disease states. Advances in the past year highlight the beneficial effect of IL-15 neutralisation in models of psoriasis and diabetes. Further evidence for IL-15 expression and effector function has emerged across a range of rheumatic disorders, including juvenile inflammatory arthritis, rheumatoid arthritis, and Kawasaki disease. Interleukin-15 (IL-15) is a gammacommone cytokine, which plays an important role in the development, survival, and proliferation of NK, NK Tand CD8⁺ T-cells.

Recombinant murine IL-15 produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 115 amino acids and having a molecular mass of 13.3 kDa. IL-15 is purified by proprietary chromatographic techniques.

Selected References:

- D'Agostino *et al.* (2004) Interleukin-15, as interferon-gamma, induces the killing of *Leishmania infantum* in phorbol-myristateacetate-activated macrophages increasing interleukin-12. *Scand. J. Immunol.* **60**:609.
- Roychowdhury *et al.* (2004) Failed adoptive immunotherapy with tumor-specific T cells: reversal with low-dose interleukin 15 but not low-dose interleukin 2. *Cancer Res.* **64**:8062.
- Lieberman *et al.* (2004) Interleukin-15-deficient mice develop protective immunity to *Toxoplasma gondii*. *Infect. Immun.* **72**:6729.
- Millington *et al.* (2004) Interleukin-15 is not required for the induction or maintenance of orally induced peripheral tolerance. *Immunology.* **113**:304.
- Ge *et al.* (2004) Synthesis and secretion of interleukin-15 by freshly isolated human bronchial epithelial cells. *Int. Arch. Allergy Immunol.* **135**:235.
- Grzegorzewska *et al.* (2004) Serum levels of cancer antigen 125 and interleukin-15 in relation to the nutrition status of peritoneal dialysis patients. *Adv. Perit. Dial.* **20**:185.