

Recombinant Human IL-15 (Interleukin-15)

Product Description

Interleukin 15 is a cytokine with structural similarity to IL-2. Like IL-2, IL-15 binds to and signals through the IL-2/IL-15 beta chain (CD122) and the common gamma chain (gamma-C, CD132). IL-15 is secreted by mononuclear phagocytes (and some other cells) following infection by virus(es). This cytokine induces cell proliferation of natural killer cells; cells of the innate immune system whose principal role is to kill virally infected cells. Interleukin 15 (IL-15) regulates T and natural killer (NK) cell activation and proliferation. Survival signals that maintain memory T cells in the absence of antigen are provided by IL-15. This cytokine is also implicated in NK cell development. In rodent lymphocytes, IL-15 prevents apoptosis by inducing an apoptosis inhibitor, BCL2L1/BCL-x(L). IL-15 has been shown to enhance the anti-tumor immunity of CD8+ T cells in pre-clinical models. A phase I clinical trial to evaluate the safety, dosing, and anti-tumor efficacy of IL-15 in patients with metastatic melanoma and renal cell carcinoma (kidney cancer) has begun to enroll patients at the National Institutes of Health.

Typical Specifications

Species	Human
Expression	HEK293 Cell Expressed
Activity	Typically <0.5 ng/mL ED ₅₀
Purity	>95%
Endotoxin	<1.0 EU/μg
Molecular Mass	12.8 kDa
Formulation	PBS, pH7.4
Country of Origin	USA

Limited Use and Restrictions

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Purity Confirmation

This was determined by SDS-PAGE.

Activity Assay

Determined by the dose-dependent stimulation of the proliferation of CTLL-2 cells.

Reconstitution Buffer

See Certificate of Analysis for reconstitution instructions and specific concentrations.

Storage

Lyophilized Protein should be stored at -20° or lower for long term storage. Upon reconstitution, working aliquots should be stored at -20° or -70°. Avoid repeated freeze-thaw cycles.