# Recombinant Human IL15

**Cat No:HR2R1543**

For research use only

## Overview

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| Quantity | 10 ?g |
| Gene Symbol | IL15 |
| Gene ID | 3600 |
| Accession | P40933 |
| Alternative Name | IL-15, IL-T<br/>Recombinant Human Interleukin-15 (IL15) |
| Species | Human |
| Source | E. coli |
| Description | IL-15 has been shown to be produced by human fetal astrocytes and microglial cells in response to IL-1-beta, IFN-gamma, or TNF-alpha and may thus play a role in T cell mediated immune responses in the human central nervous system. IL-15 stimulates proliferation of the established T cell line CTLL-2, CD8(+) memory T cells require IL-15 for proliferation. IL-15 is also able to induce generation of cytolytic cells and LAK cells activity in vitro. IL-15 appears to function as a specific maturation factor for natural killer cells and can mimic the bone marrow microenvironment in vitro, which is required for natural killer cells to acquire lytic functions. IL-15 induces proliferation of mast cells in the absence of functional IL-2 receptor components and utilizes a receptor of 60-65 kDa that is distinct from known components of T cell IL-15 receptors. The IL-15 receptor on mast cells recruits JAK2 and STAT5, instead of JAK1, JAK3 and STAT3 and STAT5 that are activated in T cells. The alpha subunit of the IL-15 receptor (IL-15RA) is structurally related to the alpha subunit of the IL-2 receptor and confers high affinity binding of IL-15 to its receptor. IL-15 binds to the beta and gamma chains of the IL-2 receptor, which are known to be required for ligand internalization and signal transduction. |
| Functions | The ED(50) as determined by the dose-dependent proliferation of T lympocytes was <0.1ng/ml. |
| Formulation | Recombinant IL-15 was lyophilized from a 0.2 ?m filtered PBS solution pH 7.5. |
| Solubility | A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers. |
| Appearance | Lyophilized Powder |
| Molecular Weight | 13 |
| Purity | >95% as determined by SDS-PAGE |
| Concentration | <1.0 EU/?g of recombinant protein as determined by the LAL method. |
| Shipping Condition | Ambient Temperature |

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| Storage Condition | The lyophilized protein is stable for at least one year from date of receipt at -70?C. Upon reconstitution, this cytokine can be stored in working aliquots at 2? - 8?C for one month, or at -20?C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles. |

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