

Recombinant Human IL15

Cat No:HR2R1544

For research use only

Overview

Quantity	1.0 ?g
Gene Symbol	IL15
Gene ID	3600
Accession	P40933
Alternative Name	IL-15, IL-T 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) was determined by the dose-dependent proliferation of mouse CTLL-2 cells and was found less than 0.3 ng/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

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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