

Recombinant Human IL15

Recombinant human protein expressed in E. coli cells

Catalog # **1875-40N**

Lot # G3211-57

Product Description

Recombinant Human IL15 was expressed in E. coli cells. The protein accession number is [P40933](#)

Gene Aliases

IL-15, IL-T

Recombinant Human Interleukin-15 (IL15)

Endotoxin Level

<1.0 EU/µg of recombinant protein as determined by the LAL method.

Formulation

Recombinant IL-15 was lyophilized from a 0.2 µm filtered PBS solution pH 7.5.

Reconstitution Protocol

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.

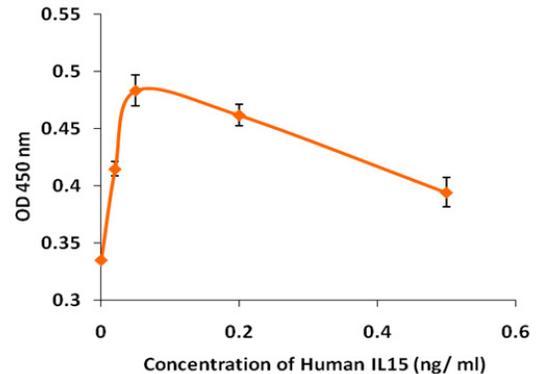
Storage and Stability

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.

Scientific Background

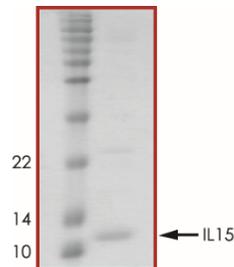
IL-15 has been shown to be produced by human fetal astrocytes and microglial cells in response to IL-1-beta, IFN-gamma, or TNF-alpha and may thus play a role in T cell mediated immune responses in the human central nervous system. IL-15 stimulates proliferation of the established T cell line CTLL-2, 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.

Specific Activity



The ED(50) as determined by the dose-dependent proliferation of T lymphocytes was <0.1 ng/ml.

Purity



Recombinant Human IL15 resolved on a 17% SDS-PAGE gel under reducing conditions and stained with Coomassie Brilliant Blue G-250

Approx. MW **13.0 kDa**

Recombinant Human IL15

Recombinant human protein expressed in E. coli cells

Catalog Number	1875-40N
Specific Lot Number	G3211-57
Purity	95%
Stability	6 mos. at -20°C from date of shipment
Storage & Shipping	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.

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: orders@signalchem.com
www.signalchem.com

FOR IN VITRO RESEARCH PURPOSES ONLY. NOT INTENDED FOR USE IN HUMAN OR ANIMALS.