

AR09050PU-N**Recombinant human Interleukin-15 (IL-15) (aa 49-162), His-tagged**

Alternate names: IL-15
Quantity: 0.1 mg
Concentration: 1.0 mg/ml
Background:

Interleukin (IL-15) is a pleiotropic cytokine that plays a pivotal role in both innate and adaptive immunity. IL-15 is unique among cytokines due to its participation in a trans signaling mechanism in which IL-15 receptor alpha (IL-15R alpha) from one subset of cells presents IL-15 to neighboring IL-2R beta/gamma(c)-expressing cells. This newly discovered cytokine is produced by a wide variety of cells and tissues and like IL-2, stimulates the proliferation of T-lymphocytes and induces the generation of cytotoxic T-lymphocytes (CTLs) and lymphokine-activated killer (LAK) cells.

Uniprot ID: [P40933](#)
NCBI: [NP_000576.1](#)
GeneID: [3600](#)
Species: Human
Source: E. coli
Format:

State: Liquid purified protein
Purity: >95% by SDS PAGE
Buffer System: PBS, pH 7.4, 0.2 mM PMSF, 10% glycerol
Endotoxin Level: < 1.0 EU per 1 µg of protein (determined by LAL method)

Description:

Recombinant human IL-15, fused to His-tag, was expressed in E.coli and purified by using conventional chromatography after refolding of the isolated inclusion bodies in a redox buffer.

AA Sequence:

MNWNVISDL KKIEDLIQSM HIDATLYTES DVHPSCKVTA MKCFLELQV ISLES GDASI
HDTVENLIIL ANNSLSSNGN VTESGCKECE ELEEKNIKEF LQSFVHIVQM FINTSLEHHH HHH

Biological Activity: Measured in a cell proliferation assay using CTLL2 mouse cytotoxic T cells. The ED50 for this effect is < 2.5 ng/ml.

Activity Assay

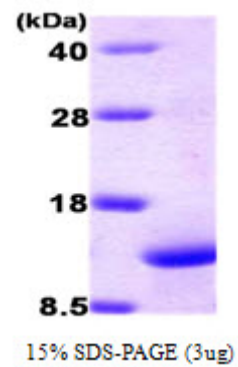
1. Cell line: CTLL2 (mouse cytotoxic T cell)
2. Maintenance Condition: 10% FBS RPMI 1640 with hIL2
3. Assay Medium: 10% FBS RPMI 1640 without hIL2
4. Cell Density: 2 x 10⁴ cells/well (96 well plate, final volume 100ul)
5. Starvation : 24hr, Assay medium
6. Incubation Time: 24hr (after sample treatment)
7. Concentration Range: 0.039 ng/ml - 40 ng/ml
8. Detection Method : MTT assay

Molecular weight: 13.9 kDa (123 aa), confirmed by MALDI-TOF

Storage: Store (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings: Lorenzen I., et al., (2006). J Biol Chem. Mar 10; 281 (10):6642-7.

Pictures:



Interleukin 15: 15% SDS-PAGE (3 μ g)

