

## Interleukin 15, 49-162aa, Mouse, His-tagged, Recombinant, *E.coli*

Cat. No. IBATGP0292

Synonyms: IL-15

NCBI Accession No.: NP\_032383

**Description:** Interleukin (IL)-15 is a pleiotropic cytokine that plays a pivotal role in both innate and adaptive immunity and has structural similarity to IL-2 that is secreted by mononuclear phagocytes following infection by viruses. Stimulation by IL-15 requires interaction of IL-15 with components of IL-2R, including IL-2Rbeta and probably IL-2R gamma, but not IL-2R alpha. This 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.

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

**Form:** Liquid. In Phosphate Buffered Saline (pH7.4) containing 10% glycerol

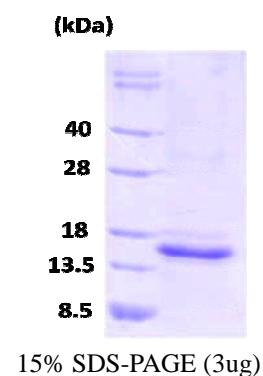
**Molecular Weight:** 17.6 kDa (152aa), confirmed by MALDI-TOF

**Purity:** > 90% by SDS - PAGE

**Concentration:** 0.5 mg/ml (determined by Bradford assay)

**Endotoxin Level:** < 1.0 EU per 1 µg of protein (determined by LAL method )

**Biological activity:** Measured in a cell proliferation assay using CTLL2 mouse cytotoxic T cells. The ED50 for this effect is < 1 ng/ml.



### Activity Assay

1. Cell line: CTLL2 (mouse cytotoxic Tcell)
2. Maintenance Condition: 10% FBS RPMI 1640 with hIL2
3. Assay Medium: 10% FBS RPMI 1640 without hIL2
4. Cell Density: 2 x 10<sup>4</sup> 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

### Sequences of amino acids:

MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSHMNW IDVRYDLEKI ESLIQSIHID TTYLTDSDFH PSCKVTAMNC FLELEQVILH  
EYSNMTLNET VRNVLYLANS TLSSNKNVAE SGCKECEELE EKTTFEFLQS FIRIVQMFN TS

### General references:

Ozawa A., *et al.* (2009). *J Immunol.* **183**(3):2193.

Olsen SK., *et al.* (2007). *J Biol Chem.* **282**(51):37191-204.

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.



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