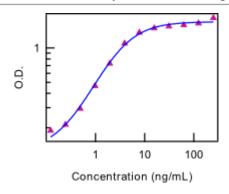


# Mouse IL-15/IL-15R Complex Recombinant Protein Carrier-Free

Catalog Number: 34-8152

Also known as: Interleukin 15, IL15, IL-15 receptor, receptor/ligand complex

RUO: For Research Use Only. Not for use in diagnostic procedures.



Proliferation of the CTLL-2 cell line in response to Mouse IL-15R/IL-15 Complex Recombinant Protein Carrier-Free

### **Product Information**

Contents: Mouse IL-15/IL-15R Complex Recombinant Protein Carrier-Free



**REF** Catalog Number: 34-8152

Handling Conditions: For best recovery, quick-spin vial prior to opening. Use in

sterile envrioment.

Source: Insect cell expressed N-terminal His-Tagged mIL-15Ra Gly33-Ala132 (accession # NP 032384) - GS linker - mIL-15 Asn49-Ser162 (accession # NP 032383).

Molecular Mass: 29.4 kDa

**Purity:** Greater than 98%, as determined by

SDS-PAGE

Endotoxin: Less than 0.1 ng/ug cytokine as

determined by the LAL assay.

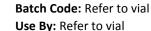
Bioactivity: The ED50 of this protein, as measured by CTLL-2 cell proliferation assay, is less than or equal to 4 ng/mL. This corresponds to a specific activity of greater than or equal to 2.5 x 10e5 Units/mg.

Formulation: Sterile liquid; 20mM Tris, 60mM

NaCl, pH 8, 0.22 μm filtered.

Temperature Limitation: Store at less than or

equal to -70°C.







This recombinant protein is the heterocomplex of the mouse IL-15 linked to soluble IL-15 receptor alpha chain (sushi domain) via a GS linker.

Interleukin 15 (IL-15) is a cytokine that stimulates T and NK cell proliferation and differentiation. IL-15 regulates macrophage proinflammatory and chemotactic protein production. In addition, it induces differentiation of monocytes towards dendritic cells. The receptor for IL-15 is a high affinity heterotrimeric receptor composed of IL-15Rα and 2 additional subunits of the IL-2 receptor (beta and gamma). Upon activation, the receptor complex signals via the Stat and JAK pathways.



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It has been reported that the soluble form of IL-15R $\alpha$  corresponding to the entire extracellular domain, cleaved by MMP's, behaves as a high affinity IL-15 antagonist, whereas the recombinant extracellular domain comprised of the sushi domain together with the ligand, IL-15, behaves as a potent agonist by enhancing binding of IL-15 to the receptor complex. In fact, this receptor-ligand complex has approximately 10-100 fold increased proliferative activity.

#### **Applications Reported**

Recombinant mouse IL-15/IL-15RA complex is biologically active.

#### **Applications Tested**

The ED50 of this protein, as measured by CTLL-2 cell proliferation assay, is less than or equal to 4 ng/mL. This corresponds to a specific activity of greater than or equal to 2.5 x 10e5 Units/mg.

#### References

Mortier E, Quéméner A, Vusio P, Lorenzen I, Boublik Y, Grötzinger J, Plet A, Jacques Y. Soluble interleukin-15 receptor alpha (IL-15R alpha)-sushi as a selective and potent agonist of IL-15 action through IL-15R beta/gamma. Hyperagonist IL-15 x IL-15R alpha fusion proteins. J Biol Chem. 2006 Jan 20;281(3):1612-9.

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### **Related Products**

14-8152 Mouse IL-15/IL-15R Complex Recombinant Protein 34-8151 Mouse IL-15 Recombinant Protein Carrier-Free