

# Mouse IL-15/IL-15R Complex Recombinant Protein, eBioscience™

## Product Details

Size	25 µg
Species	Mouse
Amino acid sequence	N-terminal his-tagged mIL-15Ra, amino acids Gly33-Ala132 (Accession # NP_032384)-GS linker-mIL-15, amino acids Asn49-Ser162 (Accession # NP_032383)
Tag	His-tag
Molecular weight	29.4 kDa
Class	Recombinant
Type	Protein
Purity	>90% by SDS-PAGE
Endotoxin concentration	<0.1 ng/µg
Activity	ED50 < 4 ng/mL; determined by dose-dependent proliferation of CTLL-2 cells.
Conjugate	Unconjugated
Form	Liquid
Concentration	0.1 mg/mL
Storage conditions	-80°C

Applications	Tested Dilution	Publications
Functional Assay (FN)	Assay-Dependent	-
Control (Ctrl)	Assay-Dependent	-
Miscellaneous PubMed (Misc)	-	5 Publications

## Product Specific Information

**Description:** 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-15Ralpha and 2 additional subunits of the IL-2 receptor (beta and gamma). Upon activation, the receptor complex signals via the Stat and JAK pathways.

It has been reported that the soluble form of IL-15Ralpha 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 10<sup>5</sup> Units/mg.

**Source:** Insect cell expressed N-terminal His-Tagged mIL-15Ra Gly33-Ala132 accession # NP\_032384-GS linker-mIL-15 Asn49-Ser162 accession # NP\_032383.

**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 10<sup>5</sup> Units/mg.

Endotoxin: Less than 0.1 ng/ug cytokine as determined by the LAL assay. Purity: >98% as determined by SDS-PAGE.

Molecular Weight: 29.4 kDa.

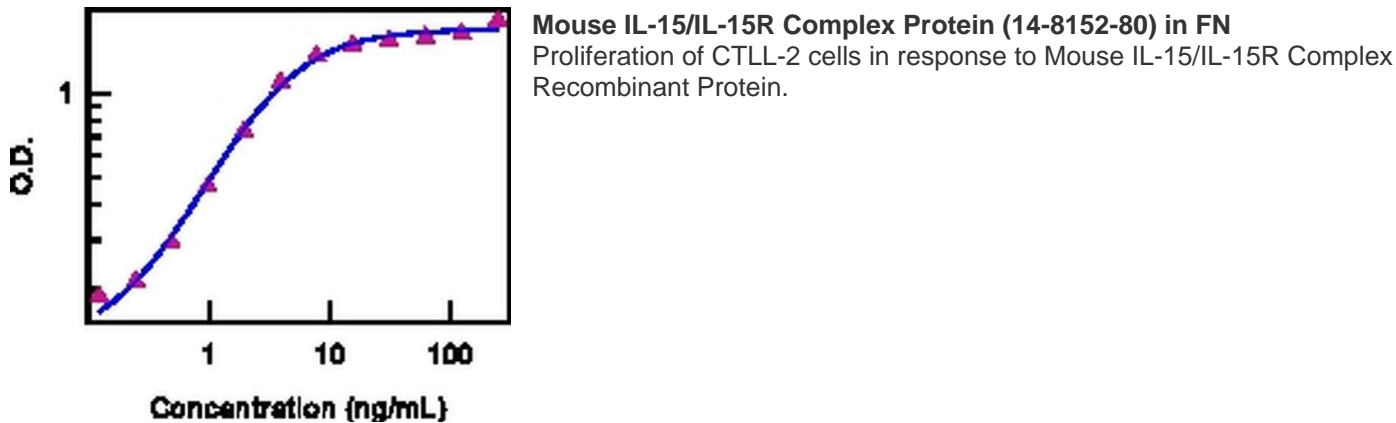
Storage and handling: For best recovery, quick-spin vial prior to opening. Use in a sterile environment.

Purity: Greater than 90%, as determined by SDS-PAGE.

Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For Mouse IL-15/IL-15R Complex Recombinant Protein, eBioscience™



5 References

Miscellaneous PubMed (5)

Immunity	Year 2017
<b>Group 1 Innate Lymphoid Cell Lineage Identity Is Determined by a cis-Regulatory Element Marked by a Long Non-coding RNA.</b>	
Authors: Mowel WK, McCright SJ, Kotzin JJ, Collet MA, Uyar A, Chen X, DeLaney A, Spencer SP, Virtue AT, Yang E, Villarino A, Kurachi M, Dunagin MC, Pritchard GH, Stein J, Hughes C, Fonseca-Pereira D, Veiga-Fernandes H, Raj A, Kambayashi T, Brodsky IE, O'Shea JJ, Wherry EJ, Goff LA, Rinn JL, Williams A, Flavell RA, Henao-Mejia J	
Autophagy	Year 2016
<b>Common -chain cytokine signaling is required for macroautophagy induction during CD4+ T-cell activation.</b>	
Authors: Botbol Y, Patel B, Macian F	

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