

Recombinant Human IL-15RA&IL-15 (C-Fc)

Catalog No.: RP0074

Basic Information

Information

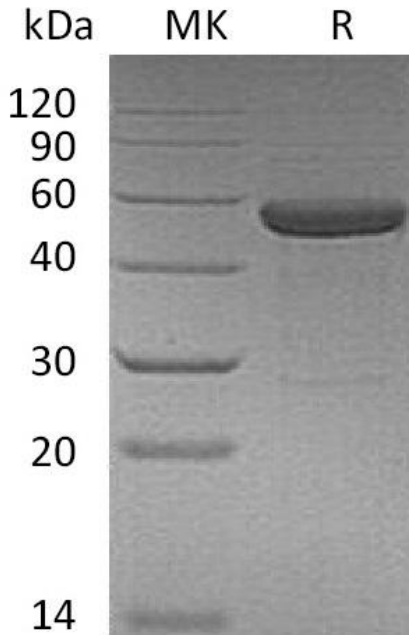
Source	<i>Human Cells</i>
Description	Recombinant Human Interleukin-15 Receptor Alpha & Interleukin-15 Fusion Protein is produced by our Mammalian expression system and the target gene encoding Ile31-Asp96&Asn49-Ser162(Asn120Asp) is expressed with a human IgG1 Fc tag at the C-terminus.
Accession	Q13261&P40933
Known As	IL15RA&IL15; Interleukin-15; IL-15; IL15; IL-15 receptor subunit alpha; IL-15RA; IL-15R-alpha; interleukin-15 receptor subunit alpha
Predicted Mol Mass	46.9 KDa
Apparent Mol Mass	50-60 KDa, reducing conditions

Properties

Formulation	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 8% Trehalose, 4% Mannitol, 0.02% Tween80 (w/v), pH 7.5.
Storage	Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.
Endotoxin	< 1 EU/µg as determined by LAL test.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

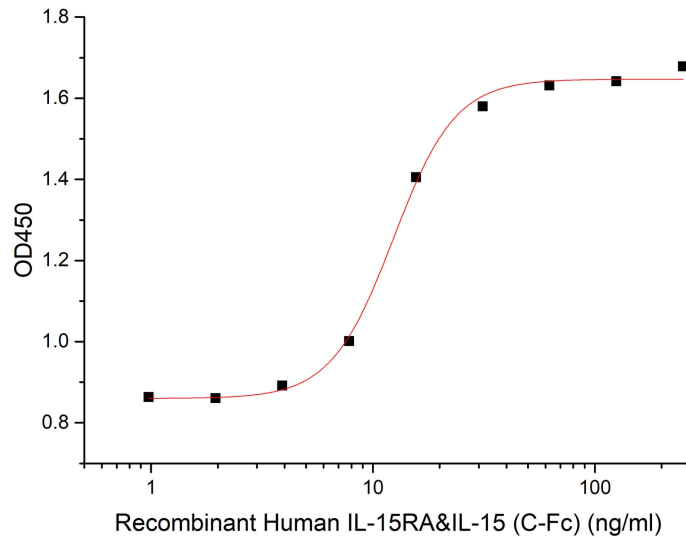
Experimental Data

Purity-SDS-PAGE



Greater than 95% as determined by reducing SDS-PAGE. (QC verified)

Bioactivity-Cell Based Assay



Measured in a cell proliferation assay using CTLL-2 mouse cytotoxic T cells. The ED50 for this effect is 5-20 ng/ml. (QC verified)

Background

IL15RA is a high-affinity receptor for interleukin-15. IL15ra associates as a heterotrimer with the IL-2 receptor beta and gamma subunits to initiate signal transduction. It can signal both in cis and trans where IL15R from one subset of cells presents IL15 to neighboring IL2RG-expressing cells. IL15ra is expressed in special cells including a wide variety of T and B cells and non-lymphoid cells. IL-15 is a cytokine that regulates T cell and natural killer cell activation and proliferation. IL-15 binds to the alpha subunit of the IL-15RA with high affinity. IL-15 also binds to the beta and gamma chains of the IL-2 receptor, but not the alpha subunit of the IL2 receptor. IL-15 is structurally and functionally related to IL-2. Both cytokines share some subunits of receptors, allowing them to compete for and negatively regulate each other's activity. The number of CD8+ memory T cells is controlled by a balance between IL-15 and IL-2. Despite their many overlapping functional properties, IL-2 and IL-15 are, in fact, quite distinct players in the immune system. IL-15 is constitutively expressed by a wide variety of cell types and tissues, including monocytes, macrophages and DCs.