

Recombinant Human IL-15

Catalog No.: RP0010

Basic Information

Information

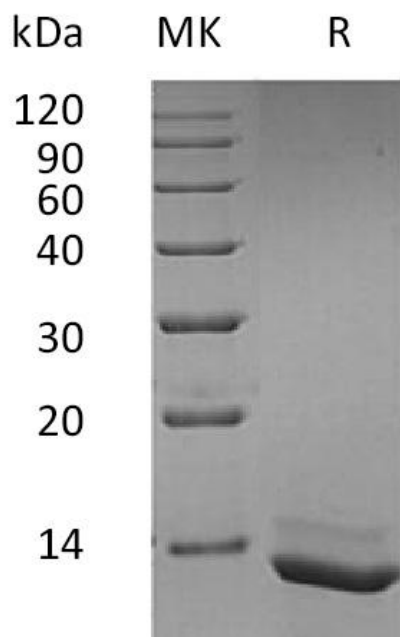
Source	<i>E.coli</i>
Description	Recombinant Human Interleukin-15 is produced by our E.coli expression system and the target gene encoding Asn49-Ser162 is expressed.
Accession	P40933
Known As	Interleukin-15; IL-15; IL15
Predicted Mol Mass	12.5 KDa
Apparent Mol Mass	12 KDa, reducing conditions

Properties

Formulation	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.0.
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	< 0.01 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.

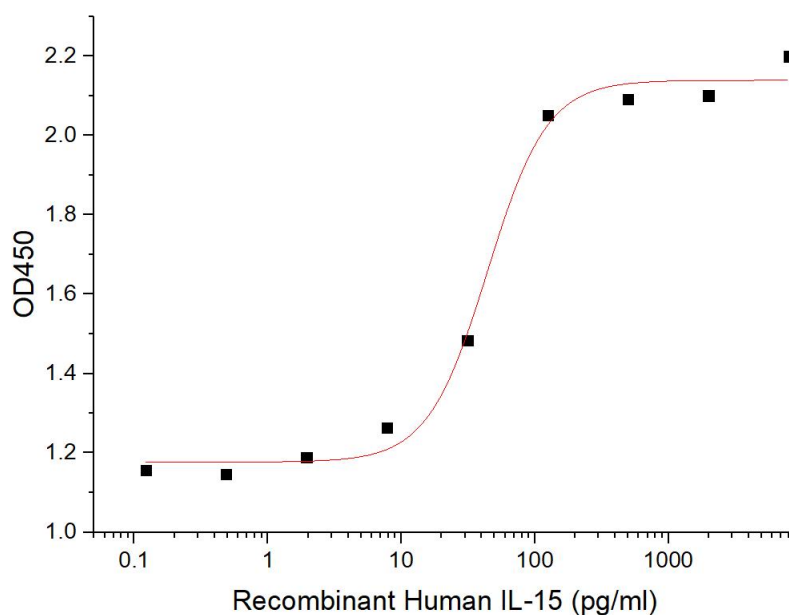
Experimental Data

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 40-200pg/ml. (QC verified)

Background

Human Interleukin 15 (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 IL15 receptor (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. Mature Human IL-15 shares 70% amino acid sequence identity with Mouse and Rat IL-15.