

## Recombinant Human Interleukin-15/IL-15 Protein

**Catalog Number:** PKSH033630

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

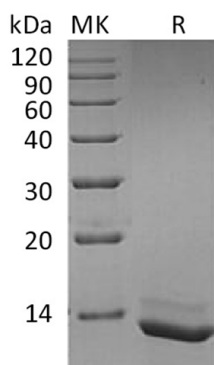
### Description

<b>Species</b>	Human
<b>Source</b>	E.coli-derived Human Interleukin-15/IL-15 protein Asn49-Ser162, with an N-terminal His
<b>Calculated MW</b>	13.7 kDa
<b>Observed MW</b>	13 kDa
<b>Accession</b>	P40933
<b>Bio-activity</b>	Measure by its ability to induce proliferation in CTLL-2 cells. The ED <sub>50</sub> for this effect is < 3 ng/mL. The specific activity of recombinant human IL-15 is > 2 x 10 <sup>6</sup> IU/mg.

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 0.01 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 8.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

### For Research Use Only

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.