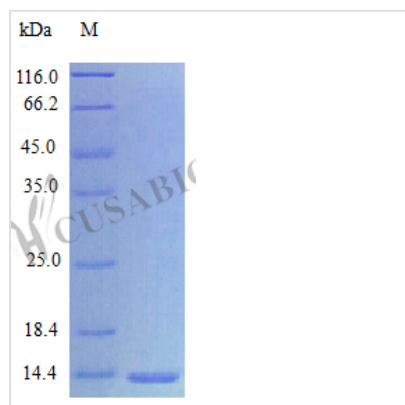




# Recombinant Human Interleukin-15 protein (IL15) (Active)

<b>Product Code</b>	CSB-AP001621HU
<b>Abbreviation</b>	Recombinant Human IL15 protein (Active)
<b>Uniprot No.</b>	P40933
<b>Form</b>	Lyophilized powder
<b>Storage Buffer</b>	Lyophilized from a 0.2 µm filtered PBS, pH 7.4
<b>Product Type</b>	Interleukin
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Biological Activity</b>	Measured in a cell proliferation assay using MO7e human megakaryocytic leukemic cells. The ED50 for this effect is 0.300-2.60 ng/mL. The specific activity of recombinant human IL-15 is $\geq 1.50 \times 10^8$ units/mg, which is calibrated against the human IL-15 reference standard (NIBSC code: 95/554).
<b>Purity</b>	>97% as determined by SDS-PAGE.
<b>Sequence</b>	NWVNVISDLK KIEDLIQSMH IDATLYTESD VHPSCCKVTAM KCFLLELQVI SLESGDASIH DTVENLIILA NNSLSSNGNV TESGCKECEE LEEKNIKEFL QSFVHIVQMF INTS
<b>Research Area</b>	Immunology
<b>Source</b>	E.coli
<b>Target Names</b>	IL15
<b>Expression Region</b>	49-162aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag-Free
<b>Mol. Weight</b>	12.9 kDa
<b>Protein Length</b>	Full Length of Mature Protein
<b>PubMed ID</b>	8178155; 8932977; 8668345; 9405632; 14702039; 15489334; 21167836
<b>Image</b>	



## Description

The Recombinant Human Interleukin-15/IL15 was generated by the expression of a DNA sequence corresponding to 49-162aa of human IL15 in E.coli. The full-length of mature protein reached up to 97% in purity measured by SDS-PAGE and HPLC analyses. It was also verified to be fully biologically active through its effect on a cell proliferation assay using murine CTLL-2 cells (ED<sub>50</sub><0.5 ng/ml, specific activity >2.0x10<sup>6</sup> IU/mg). The endotoxin of this IL10 is less than 1.0 EU/μg as determined by the LAL method. Proteins in-stock are offered now. The IL15 proteins are tag-free, but CUSABIO offers custom service for you to meet the need of specific tag(s). This recombinant IL15 protein may be used to produce anti-IL15 antibodies or in the immunology studies.

IL15 is a pro-inflammatory cytokine that plays a central role in the development, survival, and activation of NK, T-, and B-cells. IL-15 binding to the IL-2/IL-15Rβ/γc heterodimeric receptor induces the activation of JAK-STAT, PI3K-Akt, and MAPK signaling pathway. The former pathway stimulates transcriptional activation such as bcl-2 and proto-oncogenes c-myc, c-fos, and c-jun, and the latter two pathways promote cell survival and activation. The anti-tumor effect of IL15 on the immune system has been reported, but IL15 also initiates and promotes several malignancies.

<b>Product Precision</b>	0.2 μm filtered PBS, pH 7.4, lyophilized
<b>Endotoxin</b>	Less than 1.0 EU/μg as determined by LAL method.
<b>Reconstitution</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.
<b>Shelf Life</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.