

DATASHEET

Version 2017-05-15

IL-15, Human**Cat. No.:** Z00377-1**Size:** 1 mg**Synonyms:** IL-15, MGC9721**Description:**

Interleukin 15 (IL-15) is a cytokine that possesses a variety of biological functions. Interleukin 15 (IL-15) stimulates the proliferation of T-lymphocytes, which requires interaction of IL-15 with components of IL-2R, including IL-2R and probably IL-2R gamma, but not IL-2R.

Recombinant human Interleukin 15 (IL-15) produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 114 amino acids and having a molecular mass of 12.5 kD.

Amino Acid Sequence:

NWV NVISDLKKIE DLIQSMHIDA TLYTESDVHP
SCKVTAMKCF LLELQVISLE SGDASIHDTV ENLIILANNS
LSSNGNVTES GCKECEEELE KNIKEFLQSF VHIVQMFINT
S

Source: *E. coli***Species:** Human

Biological Activity: The ED₅₀ as determined by the dose-dependant stimulation of the proliferation of CTLL-2 was found to be < 0.5 ng/ml, corresponding to a specific activity of > 2x10⁶ IU/mg.

Molecular Weight: 12.5 kD

Formulation: Recombinant human Interleukin-15 (IL-15) was lyophilized after extensive dialysis against 20mM PB, pH7.5, 150mM NaCl buffer.

Reconstitution: It is recommended to reconstitute the lyophilized **Recombinant Human Interleukin 15 (IL-15)** in sterile 18 MΩ-cm H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Purity: > 95% by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 0.1 ng/µg (1 EU/µg) of recombinant human Interleukin-15 (IL-15) as determined by LAL test.

Dimers: Less than 1% as determined by silver-stained SDS-PAGE gel analysis

Quantitation: Protein quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm using the absorbency value of 0.55 as the extinction coefficient for a 0.1% (1 mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).
2. Analysis by RP-HPLC, using a calibrated solution of IL-15 as a Reference Standard.

Quality Control: Less than 1% as determined by silver-stained SDS-PAGE gel analysis.

Storage: Lyophilized **recombinant human Interleukin 15 (IL-15)** remains stable at room temperature for three weeks, but it is best stored desiccated below -18°C. Upon reconstitution recombinant human Interleukin 15 (IL-15) should be stored at 4°C for up to seven days. For long term storage it is recommended that a carrier protein (0.1% HSA or BSA) be added. Avoid repeated freeze-thaw cycles.

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