

rHulL-7

Recombinant Human Interleukin-7

Product	Cat#	Package size
Recombinant Human Interleukin-7	C6027.0002	2µg
Recombinant Human Interleukin-7	C6027.0010	10µg
Recombinant Human Interleukin-7	C6027.1000	1mg

Synonyms: Lymphopoietin 1 (LP-1), pre-B cell factor, IL-7.

Product description

IL-7 is a cytokine important for B and T cell development. This cytokine and the hepatocyte growth factor (HGF) form a heterodimer that functions as a pre-pro-B cell growth-stimulating factor. This cytokine is found to be a cofactor for V(D)J rearrangement of the T cell receptor beta (TCRB) during early T cell development. This cytokine can be produced locally by intestinal epithelial and epithelial goblet cells, and may serve as a regulatory factor for intestinal mucosal lymphocytes. Knockout studies in mice suggested that this cytokine plays an essential role in lymphoid cell survival.

Recombinant Human IL-7 produced in *E.coli* is a single, non-glycosylated polypeptide of 152 amino acids and a molecular weight of 17.4 kDa.

Source: *Escherichia coli*

Biological activity

The ED50 as determined by the dose-dependent stimulation of murine 2E8 cells is <0.5ng/mL, corresponding to a Specific Activity of 2,000,000 IU/mg.

Purity: Greater than 97% by SDS-PAGE and HPLC analysis.

Amino acid sequence

DCDIEGKDG KQYESVLMVS IDQLDLSMKE IGSNCLNNEF NFFKRHCDA NKEGMFLFRA ARKLRQFLKM NSTGDFDLHL LKVSEGTTL LNCTGQVKGR
KPAALGEAQP TKSLEENKSL KEQKKLNDLC FLKRLLEIK TCWNKILMGT KEH.

Formulation: Lyophilized from a concentrated (1mg/mL) solution in water containing 1x PBS pH7.4.

Solubility / Reconstitution

It is recommended to briefly centrifuge the vial prior to opening to bring the contents to the bottom. Reconstitute the lyophilised rHulL-7 in sterile water not less than 100µg/mL, which can then be further diluted to other aqueous solutions.

Stability

Lyophilised rHulL-7 although stable at room temperature for 3 weeks, should be stored desiccated at -20°C. Reconstituted rHulL-7 is best stored refrigerated at +2°C to +8°C between 2-7 days and at -20°C for long term storage. For long term storage it is recommended to add a carrier protein (e.g., 0.1% HSA or BSA).

Please prevent from repeated freeze-thaw cycles.

Usage

This product is for **research/laboratory usage only**. It may not be used as drug, agricultural or pesticidal product, food additive or household chemical.