9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

IL 7 Human

Interleukin-7 Human Recombinant
CYK0346

Product Overview

Name	IL 7 Human
Description	
Interleukin-7 Human Recombinant	
Accession (Primary)	P13232
Synonyms	
Lymphopoietin 1 (LP-1), pre-B cell factor, IL-7.	
Introduction	
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.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile Filtered White lyophilized (freeze-dried) powder.	
Formulation	
Lyophilized from a concentrated (1mg/ml) solution in water containing 1x PBS pH-7.4.	
Stability	
Lyophilized Interleukin-7 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL7 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.	
Purity	
Greater than 97.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.	
Amino acid sequence	
DCDIEGKDG KQYESVLMVS IDQLLDSMKE IGSNCLNNEF NFFKRHICDA NKEGMFLFRA ARKLRQFLKM NSTGDFDLHL LKVSEGTTIL LNCTGQVKGR KPAALGEAQP TKSLEENKSL KEQKKLNDLC FLKRLLQEIK	

9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

TCWNKILMGT KEH.

Biological Activity

The ED 50 as determined by the dose-dependant stimulation of murine 2E8 cells is < 0.5ng/ml, corresponding to a Specific Activity of 2,000,000 IU/mg.

Solubility

It is recommended to reconstitute the lyophilized Interleukin -7 in sterile 18MΩ-cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

References

Title: Transfer of mRNA encoding recombinant immunoreceptors reprograms CD4+ and CD8+ T cells for use in the adoptive immunotherapy of cancer Publication: Gene therapy 16.5 (2009): 596-604. Link: IL 7 Human prospec publication

Precautions

IL 7 Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P13232)