



Product Datasheet

Product Name	Interleukin-7 Human Recombinant
Cata No	CB500156
Source	<i>Escherichia Coli.</i>
Synonyms	Lymphopoietin 1 (LP-1), pre-B cell factor, IL-7.

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.

Description:

Interleukin-7 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 153 amino acids and having a molecular mass of 17412 Dalton.

The IL-7 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Biological Activity

The ED50 as determined by the dose-dependant

stimulation of murine IXN/2B cells is < 0.5ng/ml, corresponding to a Specific Activity of 2×10^6 IU/mg.

Purity

Greater than 98.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Formulation

Lyophilized from a concentrated (1mg/ml) solution in water containing no additives.

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.

Sequence

MDCDIEGKDG KQYESVLMVS IDQLLDSTMKE
IGSNCLNNEF NFFKRHICDA NKEGMFLFRA
ARKLRQFLKM NSTGDFDLHL LKVSEGTTIL
LNCTGQVKGR KPAALGEAQP TKSLEENKSL
KEQKKLNDLC FLKROLLQEIK TCWNKILMGT KEH