

Please note: This document was created automatically and is not a substitute for the manufacturer's original document.

Product Datasheet

Recombinant Human IL-7 EBT-EPT013

Article Name	Recombinant Human IL-7
Biozol Catalog Number	EBT-EPT013
Supplier Catalog Number	EPT013
Alternative Catalog Number	EBT-EPT013-50
Manufacturer	ELK Biotechnology
Category	Proteine/Peptide
Product Description	Recombinant Human Interleukin-7 is produced by our E.coli expression system and the target gene encoding Asp26-His177 is expressed....
Molecular Weight	Molecular weight: 17.5 KDa. Apparent molecular weight: 18 KDa, reducing conditions
UniProt	P13232
Purity	Greater than 95% as determined by reducing SDS-PAGE.

Application Notes

Redissolve: Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.. Endotoxin: Less than 0.001 ng/µg (0.01 EU/µg) as determined by LAL test. Biological activity: Measured in a cell proliferation assay using PHA-activated human peripheral blood lymphocytes (PBL). The ED50 for this effect is 0.02-0.08 ng/ml. Background: Human Interleukin 7 (IL-7) is a potent lymphoid cell growth factor stimulating the proliferation of lymphoid progenitors. IL7 can associate with the hepatocyte growth factor (HGF) to form a hybrid cytokine that functions as a pre-pro-B cell growth-stimulating factor. Human IL7 cDNA encodes a 177 amino acid precursor protein containing a 25 amino acid signal peptide and a 152 amino acid mature protein. Human and mouse IL7 share 65% sequence identity in the mature region and both exhibit cross-species activity. IL-7 signals via IL-7 receptor (IL7R) activating multiple pathways including JaK/STAT and PI3K/AKT, which regulate lymphocyte survival, glucose uptake, proliferation, and differentiation. IL-7 is also associated with cytoplasmic IL2-R gamma for signal transduction