Recombinant Human Interleukin-7/IL-7 Protein

Catalog Number:PKSH033610



Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Synonyms Interleukin-7;IL-7;IL7

Species Human
Expression Host E.coli

Sequence Asp26-His177

Accession P13232
Calculated Molecular Weight 18.3 kDa
Observed molecular weight 19 kDa
Tag C-His

Properties

Purity > 95 % as determined by reducing SDS-PAGE.

Endotoxin < 0.1 EU per μ g of the protein as determined by the LAL method.

Storage Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to

-80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots

of reconstituted samples are stable at < -20°C for 3 months.

Shipping This product is provided as lyophilized powder which is shipped with ice packs.

Formulation Lyophilized from sterile PBS,pH 8.0.

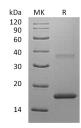
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as

protectants before lyophilization.

Please refer to the specific buffer information in the printed manual.

Reconstitution Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

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.

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