

# DATA SHEET

## GFH11

## Recombinant Human IL-7

### Description

Interleukin-7 (IL-7) is a hematopoietic cytokine that is an important regulator of B and T cell development. IL-7 is secreted by bone marrow and thymic stromal cells, dendritic cells, intestinal epithelial cells, hepatocytes, and keratinocytes. IL-7 signals through the interleukin-7 receptor (IL7R) to promote the differentiation of hematopoietic stem cells into T cells, B cells, and Natural Killer cells. IL-7 is also a regulator of intestinal mucosal lymphocyte proliferation. Human and mouse IL-7 show species cross-reactivity.

<b>Length</b>	153 aa
<b>Molecular Weight</b>	17.5 kDa
<b>Source</b>	E. coli
<b>Accession Number</b>	P13232
<b>Purity</b>	≥95% determined by reducing and non-reducing SDS-PAGE

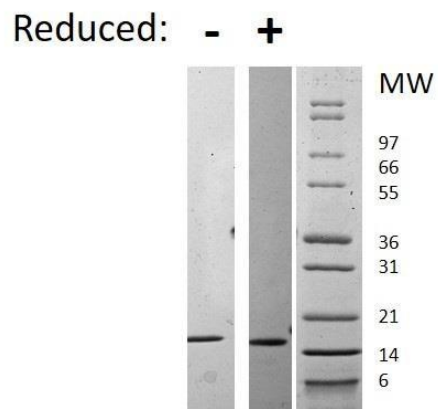
### Specifications

<b>Alternative Names</b>	Interleukin-7, interleukin 7, IL7, IL 7, lymphopietin 1, LP-1, pre-B cell factor
<b>Biological Activity</b>	Human IL-7 is fully biologically active when compared to standard. rh IL-7 activity is tested in PHA-stimulated human PMBC, with acceptance criteria for ED50 less than 0.5ng/mL.
<b>Endotoxin Level</b>	≤1.00 EU/μg as measured by kinetic LAL
<b>Formulation</b>	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM acetic acid
<b>AA Sequence</b>	MDCDIEGKDG KQYESVLMVS IDQLLDSMKE IGSNCLNNEF NFFKRHCDA NKEGMFLFRA ARKLRQFLKM NSTGDFDLHL LKVSEGTITL LNCTGQVKGR KPAALGEAQP TKSLEENKSL KEQKKLNDLC FLKRLLEQEI TCWNKILMGT KEH

### Preparation and Storage

<b>Reconstitution</b>	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/ml, which can be further diluted into other aqueous solutions.
<b>Stability and Storage</b>	12 months from date of receipt when stored at -20°C to -80°C as supplied. 1 month when stored at 4°C after reconstituting as directed. 3 months when stored at -20°C to -80°C after reconstituting as directed.

### Data



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1  $\mu$ g of protein was loaded in each lane. Human IL-7 has a predicted Mw of 17.5 kDa.