

## GFM3 Recombinant Mouse 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 (IL-7R) 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>	130 aa
<b>Molecular Weight</b>	15 kDa
<b>Source</b>	E. coli
<b>Accession Number</b>	P10168
<b>Purity</b>	≥95% determined by reducing and non-reducing SDS-PAGE

### Specifications

<b>Alternative Names</b>	Interleukin-7, interleukin 7, IL7, IL 7, lymphopoietin 1, LP-1, pre-B cell factor
<b>Biological Activity</b>	Mouse IL-7 is fully biologically active when compared to standard. The activity is determined by the ability to induce mouse 2E8 cells proliferation and it is typically less than 1 ng/ml. This corresponds to an expected specific activity of $1 \times 10^6$ units/mg.
<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 0.1% Trifluoroacetic Acid (TFA)
<b>AA Sequence</b>	MECHIKDKEG KAYESVLMIS IDELDKMTGT DSNCPNNEPN FFRKHVCCDDT KEAAFLNRAA RKLKQFLKMN ISEEFNVHLL TVSQGTQTLV NCTSKEEKNV KEQKKNDA CF LKRLLEIKT CWNKILKGS I

### 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 10 mM acetic acid 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.