

## LE/AF Purified Anti-Mouse/Human IL-7 Monoclonal Antibody



天津三箭生物技术股份有限公司  
Tianjin Sungene Biotech Co., Ltd.  
标准 高效 稳定 Precision Efficient Stable

Catalog Number	Vial Size
MH100I4-14B	50 µg
MH100I4-14E	500 µg
MH100I4-14F	1 mg

**Market** | 400-621-0003  
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**Important Note:** Centrifuge before opening to ensure complete recovery of vial contents.  
This product is guaranteed up to one year from purchase.

## Purified Antibody Characterization

Clone	Isotype	Reactivity
M25	Rat IgG2b	Mouse

## Description

IL-7 was initially described as a pre B-cell grow factor expressed in bone marrow stromal cells. IL-7 is essential for normal murine B cell development, and plays a key role in regulating the homeostasis and function of the T-cells. The binding of IL-7 to its receptor induces dimerization of IL-7Ra and the common gamma chain (gc) which leads to activation of receptor associated tyrosine Janus kinases JAK1 (IL-7R) and JAK3 (yc). In adult mice, IL-7/IL-7R signaling up regulates expression of early B cell factor (EBF), and EBF in turn regulates expression of B cell-specific genes required for the transition from lymphoid progenitor to pro-B cells. Besides, IL-7 plays a role in the development of secondary lymphoid tissues. IL-7 is necessary to specify CD8 lineage differentiation during CD4/CD8 cell fate choice in the thymus by inducing expression of the transcription factor Runx3. IL-7 induces anti-apoptotic factors Bcl2 and Bcl-xL and inhibiting pro-apoptotic factors such as Bad and Bax. In this fashion, IL-7 induces cell activation, survival, and proliferation of T lymphocytes. In addition, IL-7 controls T-cell size and metabolism through the activation of PI3 kinase-dependent pathways and regulation of glucose metabolism. IL-7 also controls T cell–dendritic cell interactions that are essential for both T-cell homeostasis and activation in vivo. CD4 T cell lymphopenia increases the expression of circulating IL-7, and TGFb induces IL-7 downregulation.

## Reported Applications

This M25 antibody has been reported for use in flow cytometric staining.

## Product Information

**Production Method:** Stirred tank fermentation

**Medium:** Hybridoma-SFM + 1%FCS + Gln + Gluc + P/S

**Purification Method:** Protein G

**Concentration:** 1 mg/ml

**Endotoxin:** < 2.00 EU/mg (LAL)

**Purity:** >95% (by SDS-PAGE)

**Sterile:** 0.2 µm Filtration

**Formulated:** PBS, pH7.2

**Storage:** Keep as concentrated solution. Store at 4°C as an undiluted liquid. For extended storage aliquot contents and freeze at -20°C or lower. Avoid cycles of freezing and thawing.

**For Research Use Only.**