

## Product datasheet for **PM1003A**

### IL7 Mouse Monoclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, FN, WB
Recommended Dilution:	<b>Neutralization:</b> To yield one-half maximal inhibition [ND50] of the biological activity of hIL-7 (0.5 ng/ml), a concentration of 0.05-0.08 µg/ml of this antibody is required. <b>ELISA:</b> In a Sandwich ELISA (assuming 100µl/well), a concentration of 1.0-2.0 µg/ml of this antibody will detect at least 1000 pg/ml of recombinant Human IL-7 when used with Biotin anti-Human IL-7 antibody (PP1029B1 or PP1029B2) as the detection antibody at a concentration of approximately 0.05-0.1 µg/ml. <b>Western Blot:</b> To detect Human IL-7 by Western Blot analysis this antibody can be used at a concentration of 0.25-0.50 µg/ml. When used in conjunction with compatible secondary reagents the detection limit for recombinant Human IL-7 is 1.0-2.0 ng/lane, under reducing conditions and non-reducing conditions.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Recombinant human IL-7.
Specificity:	This antibody recognises Human IL-7.
Formulation:	PBS without preservatives. State: Azide Free State: Lyophilized (sterile filtered) purified Ig fraction.
Reconstitution Method:	Restore in sterile water to a concentration of 1.0 mg/ml.
Purification:	Affinity Chromatography on Protein G.
Conjugation:	Unconjugated
Storage:	Store the antibody prior to reconstitution at -20°C. Following reconstitution the antibody can be stored at 2-8°C for one month or at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.
Gene Name:	interleukin 7



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**Database Link:** [Entrez Gene 3574 Human P13232](#)

**Background:** Interleukin 7 (IL7) is a lymphoid cell growth factor that affects pre-B, pro-B, and early T cells. IL7 was previously known as pre-B cell growth factor and lymphopoietin 1. IL7 supports the growth of early B cells from long-term lymphoid bone marrow cultures. It is mitogenic to thymocytes and enhances the response of cells to other stimuli such as polyhydroxyalkanoate (PHA) and concanavalin A (ConA). IL7 stimulates the proliferation of CD4+/CD8+ cells. The proliferative response of thymocytes to IL7 is not affected by antibodies to the T cell growth factors such as IL2, IL4 and IL6, suggesting that IL7 is capable of stimulating T cell proliferation through a pathway independent of the known T cell growth factors. Mature T cells respond to IL7 and Con A, but not to IL7 alone. In myeloid lineage cells, IL7 upregulates the production of pro-inflammatory cytokines and stimulates the tumoricidal activity of monocytes/macrophages. IL7 is expressed by adherent stromal cells from various tissues.

**Synonyms:** IL-7

**Protein Families:** Druggable Genome, Secreted Protein

**Protein Pathways:** Cytokine-cytokine receptor interaction, Hematopoietic cell lineage, Jak-STAT signaling pathway