

Purified anti-human IL-7 Antibody

Catalog# / Size	501302 / 500 µg
Clone	BVD10-40F6
Regulatory Status	RUO
Other Names	Interleukin-7, Lymphopoietin-1 (LP-1), Pre-B cell growth factor, Thymocyte growth factor
Isotype	Rat IgG1, κ
Description	IL-7 is a potent lymphoid cell growth factor which promotes the proliferation of pre-B cells, thymocytes, T cell progenitors, and mature T cells. IL-7 induces formation of LAK cells and CTLs, and can stimulate tumoricidal activity of monocytes and macrophages. IL-7 can induce upregulation of proinflammatory cytokines in myeloid cells. IL-7 is expressed by stromal cells. The BVD10-40F6 antibody can neutralize the bioactivity of natural or recombinant IL-7.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	<i>E. coli</i> - expressed, recombinant human IL-7
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	ELISA Capture - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by ELISA assay . For ELISA capture applications, a concentration range of 2-6 µg/ml is recommended. To obtain a linear standard curve, serial dilutions of IL-7 recombinant protein ranging from 500 to 4 pg/ml are recommended for each ELISA plate. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	ELISA or ELISPOT Capture ^{1,2} : The purified BVD10-40F6 antibody is useful as the capture antibody in a sandwich ELISA or ELISPOT assay, when used in conjunction with the Biotin anti-human IL-7 antibody (Cat. No. 506602) as the detecting antibody. The Ultra-LEAF™ purified antibody is suggested for ELISPOT capture. Neutralization ¹ : The Ultra-LEAF™ purified antibody (Endotoxin <0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for neutralization of human IL-7 bioactivity (Cat. No. 501305 & 501306). Additional reported applications (for the relevant formats) include: Western blotting.
Application References	1. Abrams J, <i>et al.</i> 1992. <i>Immunol. Rev.</i> 127:5. 2. Abrams J. 1995. <i>Curr. Prot. Immunol.</i> John Wiley and Sons New York. Unit 6.20.
(PubMed link indicates BioLegend citation)	
Product Citations	1. Haug V, <i>et al.</i> 2020. <i>Transplantation.</i> e260:104. PubMed 2. Gilboa T, <i>et al.</i> 2020. <i>Adv Healthc Mater.</i> e2001111: PubMed
RRID	AB_315164 (BioLegend Cat. No. 501302)

Antigen Details

Structure	Cytokine; 20-28 kD (Mammalian)
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Bioactivity	Proliferation of pre-/pro-B cells, thymocytes, T cells; formation of LAK cells, CTLs, stimulation of tumoricidal activity monocytes/macrophages; upregulate proinflammatory cytokines in myeloid cells
Cell Sources	Adherent bone marrow stromal cells, thymic stromal cells, spleen, keratinocytes
Cell Targets	Progenitor B and T cells; CD4 ⁺ CD8 ⁻ thymocytes; megakaryocytes
Receptors	Heterodimer IL-7R α (CD127); γ -subunit (CD132) in common with IL-2R, IL-4R, IL-13R, IL-15R
Biology Area	Immunology
Molecular Family	Cytokines/Chemokines
Antigen References	1. Fitzgerald K, <i>et al.</i> Eds. 2001. The Cytokine FactsBook. Academic Press San Diego. 2. Park L, <i>et al.</i> 1992. <i>Adv. Exp. Med. Biol.</i> 323 125. 3. Melchers F, <i>et al.</i> 1992. <i>Adv. Exp. Med. Biol.</i> 323 111.
Regulation	Downregulated by TGF- β
Gene ID	3574

Related Protocols

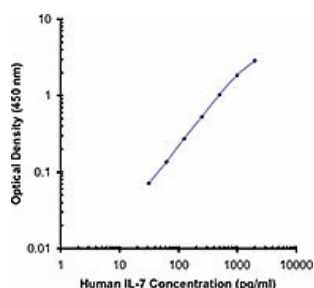
[Active Protocols: Sandwich ELISA - Video](#)

[Sandwich ELISA Protocol](#)

Other Formats

Purified anti-human IL-7, Ultra-LEAF™ Purified anti-human IL-7

Product Data



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