

PE anti-human CD124 (IL-4R α) Antibody

Catalog# / Size	355003 / 25 tests 355004 / 100 tests
Clone	G077F6
Regulatory Status	RUO
Other Names	IL-4 receptor α subunit
Isotype	Mouse IgG2a, κ
Description	CD124, also known as the alpha subunit of IL-4R, is a 140 kD transmembrane glycoprotein. It associates with either the common γ -chain (CD132) to form the type I IL-4R complex, which specifically binds IL-4, or with IL-13Ra1 to form the type II IL-4R heterodimeric complex, which binds and transduces signals from either IL-4 or IL-13. A truncated form of IL-4R α exists in the soluble form in biological fluids. CD124 is expressed on human B and T cells as well as a variety of other hematopoietic and non-hematopoietic cells and cell lines. In B cells, CD124 can bind with IL-4 and IL-13 to regulate IgE antibody production. In T cells, the type I IL-4R (IL-4R/gC) is mostly responsible for Th2 cell expansion by mediating IL-4-dependent activation of the transcription factors in hematopoietic cells. The type II IL-4R (IL-4R/IL-13Ra1) is the main route for non-hematopoietic cell responses to IL-4 or IL-13.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Recombinant human IL-4R α Fc chimera
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is 5 μ l per million cells in 100 μ l staining volume or 5 μ l per 100 μ l of whole blood.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Product Citations	<ol style="list-style-type: none">1. Wu L, <i>et al.</i> 2018. Oncol Lett. 15:9507. PubMed2. Bal S, <i>et al.</i> 2016. Nat Immunol. 10.1038/ni.3444. PubMed3. Li H, <i>et al.</i> 2016. J Immunol. 196: 4064 - 4074. PubMed4. Mansouri S, <i>et al.</i> 2020. Mucosal Immunol. 0.954861111. PubMed
RRID	AB_11218807 (BioLegend Cat. No. 355003) AB_11219385 (BioLegend Cat. No. 355004)

Antigen Details

Structure	140 kD type I transmembrane glycoprotein, associates with common γ chain or IL-13 receptor alpha-1 subunit
Distribution	B cells, T cells, endothelial cells, cancer cells
Function	Regulates IgE antibody production in B cells, Th2 cell expansion, and IL-4 or IL-13 induced response in non-hematopoietic cells
Interaction	STAT6
Ligand/Receptor	IL-4, IL-13
Cell Type	B cells, Endothelial cells, T cells
Biology Area	Apoptosis/Tumor Suppressors/Cell Death, Cell Biology, Immunology, Signal Transduction, Transcription Factors
Molecular Family	CD Molecules, Cytokine/Chemokine Receptors
Antigen References	<ol style="list-style-type: none"> 1. Kashiwada M, <i>et al.</i> 2001. <i>J. Immunol.</i> 167:6382. 2. Gilmour J, <i>et al.</i> 2008. <i>Immunology</i> 124:437. 3. Hage T, <i>et al.</i> 1999. <i>Cell</i> 97:271.
Gene ID	3566

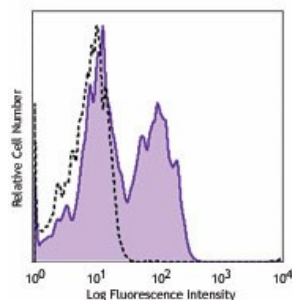
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human CD124 (IL-4R α), PE anti-human CD124 (IL-4R α), APC anti-human CD124 (IL-4R α), PE/Cyanine7 anti-human CD124 (IL-4R α), TotalSeq™-C0363 anti-human CD124 (IL-4R α), Brilliant Violet 421™ anti-human CD124 (IL-4R α), PerCP/Cyanine5.5 anti-human CD124 (IL-4R α), TotalSeq™-B0363 anti-human CD124 (IL-4R α), PE/Dazzle™594 anti-human CD124 (IL-4R α)

Product Data



Human peripheral blood lymphocytes were stained with CD19 APC and CD124 (clone G077F6) PE (filled histogram) or mouse IgG2a, κ isotype control PE (open histogram). The data was analyzed by gating on CD19-positive cells.

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