

## APC/Fire™ 750 anti-human CD124 (IL-4R $\alpha$ ) Antibody

<b>Catalog# / Size</b>	355021 / 25 tests 355022 / 100 tests
<b>Clone</b>	G077F6
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	IL-4 receptor $\alpha$ subunit
<b>Isotype</b>	Mouse IgG2a, $\kappa$
<b>Description</b>	CD124, also known as the alpha subunit of IL-4R, is a 140 kD transmembrane glycoprotein. It associates with either the common $\gamma$ -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 $\alpha$ 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

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<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Recombinant human IL-4R $\alpha$ Fc chimera
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with APC/Fire™ 750 under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our <a href="#">Certificate of Analysis</a> online tool.)
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is 5 $\mu$ L per million cells in 100 $\mu$ L staining volume or 5 $\mu$ L per 100 $\mu$ L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.  * APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum emission of 774 nm.
<b>Excitation Laser</b>	Red Laser (633 nm)
<b>RRID</b>	AB_3683378 (BioLegend Cat. No. 355021) AB_3683378 (BioLegend Cat. No. 355022)

### Antigen Details

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

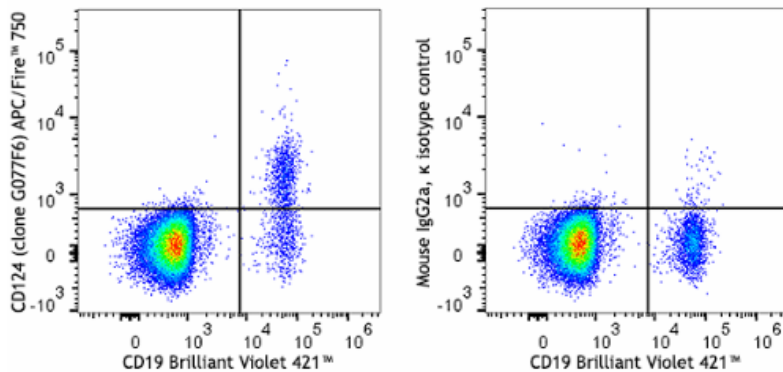
## Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

Purified anti-human CD124 (IL-4R $\alpha$ ), PE anti-human CD124 (IL-4R $\alpha$ ), APC anti-human CD124 (IL-4R $\alpha$ ), PE/Cyanine7 anti-human CD124 (IL-4R $\alpha$ ), TotalSeq™-C0363 anti-human CD124 (IL-4R $\alpha$ ), Brilliant Violet 421™ anti-human CD124 (IL-4R $\alpha$ ), PerCP/Cyanine5.5 anti-human CD124 (IL-4R $\alpha$ ), TotalSeq™-B0363 anti-human CD124 (IL-4R $\alpha$ ), PE/Dazzle™594 anti-human CD124 (IL-4R $\alpha$ ), TotalSeq™-A0363 anti-human CD124 (IL-4R $\alpha$ ), APC/Fire™ 750 anti-human CD124 (IL-4R $\alpha$ )

## Product Data



Human peripheral blood mononuclear cells were stained with anti-human CD19 (clone HIB19) Brilliant Violet 421™ and anti-human CD124 (IL-4R $\alpha$ ) (clone G077F6) APC/Fire™ 750 (left) or mouse IgG2a,  $\kappa$  APC/Fire™ 750 isotype control (right). Data shown was gated on lymphocytes.

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