PerCP-Cy™5.5 Rat anti-Mouse IL-23 Receptor

Product Information

**Material Number:** 564828  
**Alternate Name:** IL23r; IL-23R; Interleukin 23 receptor  
**Size:** 50 µg  
**Concentration:** 0.2 mg/ml  
**Clone:** O78-1208  
**Immunogen:** Mouse IL-23 Receptor Recombinant Protein  
**Isotype:** Rat (LOU) IgG1, κ  
**Reactivity:** QC Testing: Mouse  
**Storage Buffer:** Aqueous buffered solution containing ≤0.09% sodium azide.

**Description**

The O78-1208 monoclonal antibody specifically binds to the mouse Interleukin-23 Receptor (IL-23R) subunit that is encoded by the il23r gene. The IL-23R subunit is a type I transmembrane glycoprotein and member of the hemopoietin receptor superfamily. The mouse IL-23 Receptor complex is comprised of IL-23R and IL-12 receptor beta 1 (IL-12Rβ1) subunits. The IL-23R complex can bind IL-23, a cytokine that plays roles in innate and adaptive immunity as well as in autoimmune diseases, eg, by the generation and maintenance of Th17 cells. Mouse IL-23R is expressed by activated/memory CD4+ T cells, Th1, Th2 and Th17 cells, γδ T cells, dendritic cells and macrophages as determined by IL-23R mRNA expression and IL-23R-GFP reporter mouse studies. The IL-23-bound IL-23R complex transduces an intracellular signal pathway mediated by a Jak-STAT signaling cascade.

**Preparation and Storage**

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with PerCP-Cy5.5 under optimum conditions, and unconjugated antibody and free PerCP-Cy5.5 were removed. Storage of PerCP-Cy5.5 conjugates in unoptimized diluent is not recommended and may result in loss of signal intensity.

**Application Notes**

**Application**

Flow cytometry Routinely Tested

**Suggested Companion Products**

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<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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<tr>
<td>560537</td>
<td>PerCP-Cy™5.5 Rat IgG1, κ Isotype Control</td>
<td>0.1 mg</td>
<td>R3-34</td>
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<td>554656</td>
<td>Stain Buffer (FBS)</td>
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<tr>
<td>554657</td>
<td>Stain Buffer (BSA)</td>
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Flow cytometric analysis of mouse IL-23 Receptor (IL-23R) expression on IL-23R-non-transfected and IL-23R-transfected cells. Mouse IL-23R-non-transfected (Left Panel) and IL-23R-transfected (Right Panel) cells were stained with either PerCP-Cy5.5 Rat IgG1, κ Isotype Control (Cat. No. 560537; dashed line histogram) or PerCP-Cy5.5 Rat anti-Mouse IL-23 Receptor (Cat. No. 564828; solid line histogram). Flow cytometric fluorescence histograms showing the expression of IL-23R (or Ig Isotype Control staining) were derived from gated events with the forward and side light-scatter characteristics of viable cells. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.
Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Please observe the following precautions: Absorption of visible light can significantly alter the energy transfer occurring in any tandem fluorochrome conjugate; therefore, we recommend that special precautions be taken (such as wrapping vials, tubes, or racks in aluminum foil) to prevent exposure of conjugated reagents, including cells stained with those reagents, to room illumination.
5. PerCP-Cy5.5–labelled antibodies can be used with FITC- and R-PE–labelled reagents in single-laser flow cytometers with no significant spectral overlap of PerCP-Cy5.5, FITC, and R-PE fluorescence.
6. PerCP-Cy5.5 is optimized for use with a single argon ion laser emitting 488-nm light. Because of the broad absorption spectrum of the tandem fluorochrome, extra care must be taken when using dual-laser cytometers, which may directly excite both PerCP and Cy5.5™. We recommend the use of cross-beam compensation during data acquisition or software compensation during data analysis.
7. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
8. Cy is a trademark of GE Healthcare.

References


