Technical Data Sheet

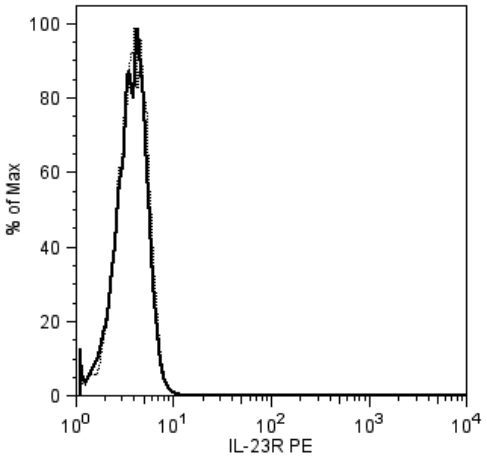
PE Mouse anti-Mouse IL-23 Receptor

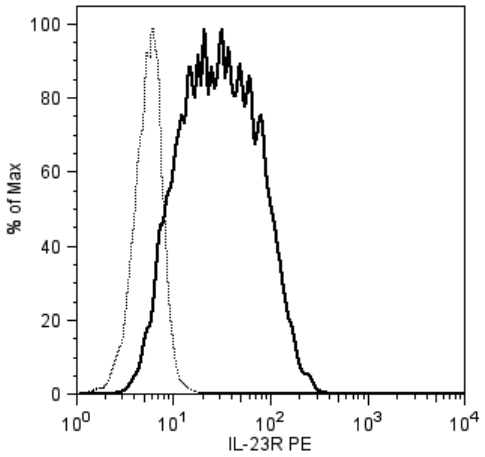
Product Information

Material Number:	**562468**
Alternate Name:	Il23r; IL-23R; Interleukin 23 receptor
Size:	25 µg
Concentration:	0.2 mg/ml
Clone:	3C9
Immunogen:	Mouse IL-23 Receptor Recombinant Protein
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 3C9 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.





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 PE Mouse IgG1, κ Isotype Control (Cat. No. 554680, dashed line histogram) or PE Mouse anti-Mouse IL-23 Receptor (Cat. No. 562468; 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.*

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 R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 mL	(none)
554680	PE Mouse IgG1, κ Isotype Control	0.1 mg	MOPC-21
554657	Stain Buffer (BSA)	500 mL	(none)

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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. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
5. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

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Lankford CS, Frucht DM. A unique role for IL-23 in promoting cellular immunity. *J Leukoc Biol.* 2003; 73(1):49-56. (Biology)

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Petermann F, Rothhammer V, Claussen MC, et al. gammadelta T cells enhance autoimmunity by restraining regulatory T cell responses via an interleukin-23-dependent mechanism. *Immunity.* 2010; 33(3):351-363. (Biology)