

Mouse IL-23 R APC-conjugated Antibody

Monoclonal Rat IgG, Clone # 753317

Catalog Number: FAB16861A

100 Tests, 25 Tests

DESCRIPTION			
Species Reactivity	Mouse		
Specificity	Detects endogenous mouse IL-23 R by flow cytometry.		
Source	Monoclonal Rat IgG ₁ Clone # 753317		
Purification	Protein A or G purified from hybridoma culture supernatant		
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse IL-23 R Gly24-Asp372 Accession # Q8K4B4		
Conjugate	Allophycocyanin Excitation Wavelength: 620-650 nm Emission Wavelength: 660-670 nm		
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheel		
	(SDS) for additional information and handling instructions.		

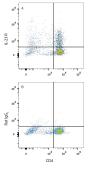
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

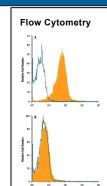
	Recommended Concentration	Sample
Flow Cytometry	10 μL/10 ⁶ cells	See Below

DATA

Flow Cytometry



Detection of IL-23 R in Mouse Splenocytes by Flow Cytometry. Mouse splenocytes treated with 10 µg/mL Anti-CD3 (Catalog # MAB484), 5 µg/mL Anti-CD28 (Catalog # AF483), 10 ng/mL Recombinant Mouse TGF-§1 (Catalog # 100-B), 20 ng/mL Recombinant Mouse IL-23 (Catalog # 1887-ML), 40 ng/mL Recombinant Mouse IL-6 (Catalog # 1887-ML), and 10 ng/mL Recombinant Mouse IL-1β (Catalog # 406-ML), and 10 ng/mL Recombinant Mouse IL-1β (Catalog # 401-ML), for 5 days to induce 171 activation were stained with Rat Anti-Mouse CD4 PE-conjugated Monoclonal Antibody (Catalog # FAB554P) and either (A) Rat Anti-Mouse IL-23 R APC-conjugated Monoclonal Antibody (Catalog # FAB18861A) or (B) Rat IgG₁ Allophycocyanin Isotype Control (Catalog # IC005A). View our protocol for Staining Membrane-associated Proteins.



Detection of IL-23 R in HEK293 Human Cell Line Transfected with Mouse IL-23 R by Flow Cytometry.

HEK293 human embryonic kidney cell line transfected with (A) mouse IL-23 R or (B) irrelevant transfectants was stained with Rat Anti-Mouse IL-23 R APC-conjugated Monoclonal Antibody (Catalog # FAB16861A, filled histogram) or isotype control antibody (Catalog # IC005A, open histogram). View our protocol for Staining Membrane-associated Proteins.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage

Protect from light. Do not freeze.

• 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Interleukin 23 (IL-23) is a heterodimeric cytokine composed of two disulfide-linked subunits, a p19 subunit that is unique to IL-23, and a p40 subunit that is shared with IL-12 (1-5). The functional IL-23 receptor complex consists of two receptor subunits, the IL-12 receptor beta 1 subunit (IL-12 Rβ1) and the IL-23-specific receptor subunit (IL-23 R) (3). Mouse IL-23 R cDNA encodes a 644 amino acid (aa) type I transmembrane protein with a 23 aa residue signal peptide, a 349 aa residue extracellular domain, a 23 aa residue transmembrane domain and a 249 aa residue cytoplasmic region. IL-23 R shares structural features with the IL-12 Rβ2, including an N-terminal Ig-like domain, two cytokine receptor domains and multiple glycosylation sites in the extracellular domain. IL-23 R lacks the three extracellular membrane-proximal fibronectin-type III domains present on IL-12 Rβ2. IL-23 R has a WQPWS sequence in the transmembrane-proximal cytokine receptor domain similar to the cytokine receptor signature WSXWS motif. The cytoplasmic region of IL-23 R has three potential Src homology 2 domain-binding sites and two potential Stat-binding sites. The gene for human IL-23 R is located on human chromosome 1 within 150 kb of IL-12 Rβ2. Human and mouse IL-23 R share 66% amino acid sequence identity. Mouse IL-23 R is expressed in mouse Th1 and Th2 cells, bone marrow, dendritic cells and macrophages. It is also expressed by mouse CD4⁺ CD45RB^{low} memory T cells but at much lower levels by mouse CD4⁺ CD45RB^{low} memory T cells but at much lower levels by mouse CD4⁺ CD45RB^{low} memory T cells but at much lower levels by mouse CD4⁺ CD45RB^{low} memory T cells but at much lower levels by mouse CD4⁺ CD45RB^{low} memory T cells but at much lower levels by mouse CD4⁺ CD45RB^{low} memory T cells but at much lower levels by mouse CD4⁺ CD45RB^{low} memory T cells but at much lower levels by mouse CD4⁺ CD45RB^{low} nemory T cells but at much lower levels by mouse CD4⁺ CD45RB^{low} nemory T cells but at much lower levels by mous

References:

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- 2. Lankford, C.S. and D.M. Frucht (2003) J. Leukoc. Biol. 73:49.
- 3. Parham, C. et al. (2002) J. Immunol. **168**:5448.
- 4. Belladonna, M.L. et al. (2002) J. Immunol. 168:5448.
- 5. Aggarwal, S. et al. (2003) J. Biol. Chem. 278:1910.

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