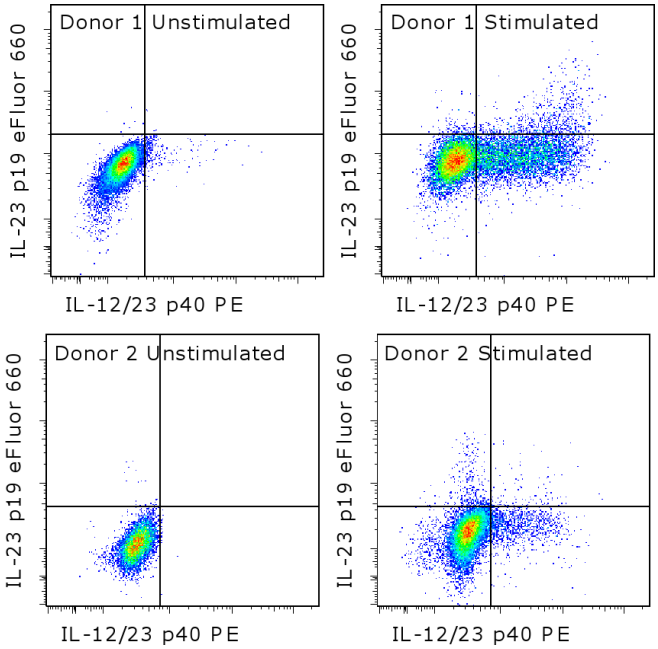
Anti-Human IL-23 p19 eFluor® 660

Catalog Number: 50-7823
Also known as: Interleukin-23 p19
RUO: For Research Use Only. Not for use in diagnostic procedures.



Intracellular staining of unstimulated (left) or LPS-stimulated and monensin-treated (right), in vitro-cultured human dendritic cells with Anti-Human IL-12/23 p40 PE (cat. 12-7235) and Anti-Human IL-23 p19 eFluor® 660. Cultures were fixed and permeabilized with the Fixation and Permeabilization Kit (cat. 88-8823). Total viable cells as determined by staining with the Fixable Viability Dye eFluor® 450 (cat. 65-0863) were used for analysis. Data from two donors are shown to illustrate variability in expression.

Product Information

Contents: Anti-Human IL-23 p19 eFluor® 660
REF **Catalog Number:** 50-7823
Clone: 23dcdp
Concentration: 5 uL (0.03 ug)/test
Host/Isotype: Mouse IgG2b, kappa

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Temperature Limitation: Store at 2-8°C. DO NOT FREEZE. LIGHT-SENSITIVE MATERIAL.
LOT **Batch Code:** Refer to vial
Use By: Refer to vial

Description

This 23dcdp monoclonal antibody reacts with the p19 subunit of human IL-23. This heterodimeric cytokine is composed of two disulfide-linked subunits, p40 and p19. It is closely related to IL-12, with which it shares the p40 subunit. The IL-23 receptor is also heterodimeric and shares the IL-12Rβ1 chain with IL-12, while the IL-23R chain is unique to the IL-23 receptor complex. IL-23R signaling occurs through the Jak/STAT pathway and results in RORγt expression, which promotes maintenance and proliferation of T helper 17 (Th17) cells.

Dendritic cells and macrophages produce high levels of p40 and low levels of IL-23 in response to TLR2, TLR4, and TLR8 ligands and agonists of the β-glucan receptor, Dectin-1. This is due to the presence of monomer and dimer forms of p40, while only a small portion associates with p19 to form IL-23. Our studies suggest donor variability, expression kinetics and type of stimulant can result in variation in IL-23 expression levels. Recent publications suggest the p19 subunit may also exist in the absence of association with p40.

Applications Reported

This 23dcdp antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested

Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.ebioscience.com • info@ebioscience.com

Anti-Human IL-23 p19 eFluor® 660

Catalog Number: 50-7823
Also known as: Interleukin-23 p19
RUO: For Research Use Only. Not for use in diagnostic procedures.

This 23dcdp antibody has been pre-titrated and tested by intracellular staining and flow cytometric analysis of cultured human dendritic cells. This can be used at 5 µl (0.03 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µl. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test.

eFluor® is a replacement for Alexa Fluor® 647. eFluor® 660 emits at 659 nm and is excited with the red laser (633 nm). Please make sure that your instrument is capable of detecting this fluorochome.

References

Kalim KW, Groettrup M. Prostaglandin E2 inhibits IL-23 and IL-12 production by human monocytes through down-regulation of their common p40 subunit. Mol Immunol. 2013 Mar;53(3):274-82 (**23dcdp**, FC, PubMed)

Brentano F, Ospelt C, Stanczyk J, Gay RE, Gay S, Kyburz D. Abundant expression of the interleukin (IL)23 subunit p19, but low levels of bioactive IL23 in the rheumatoid synovium: differential expression and Toll-like receptor-(TLR) dependent regulation of the IL23 subunits, p19 and p40, in the rheumatoid arthritis. Ann Rheum Dis. 2009 Jan; 68(1): 143-50.

Dennehy KM, Willment JA, Williams DL, Brown GD. Reciprocal regulation of IL-23 and IL-12 following co-activation of Dectin-1 and TLR signaling pathways. Eur J Immunol. 2009 May;39(5): 1379-86

Hillyen P, Larche MJ, Bowman EP, McClanahan TK, de Waal Malefyt R, Schewitz LP, Giddins G, Feldmann M, Kastelein RA, Brennan FM. Investigating the role of the interleukin-23/-17A axis in rheumatoid arthritis. Rheumatology. 2009; 48: 1581-9

Goriely S., Neurath MF., and Goldman M. How microorganisms tip the balance between interleukin-12 family members. Nat Rev Immunol. 2008 Jan;8(1):81-6

Related Products

12-7129 Anti-Human IL-12/IL-23 p40 PE (C8.6)
12-7235 Anti-Human IL-12/IL-23 p40 PE (eBioHP40 (HP40, HP-40))
50-7023 Anti-Mouse IL-23 p19 eFluor® 660 (fc23cpg)
65-0863 Fixable Viability Dye eFluor® 450
88-7237 Human IL-23 ELISA Ready-SET-Go!® Set
88-8823 Intracellular Fixation & Permeabilization Buffer (plus Brefeldin A) (previously named IC Fixation & Permeabilization Buffer)

Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.ebioscience.com • info@ebioscience.com