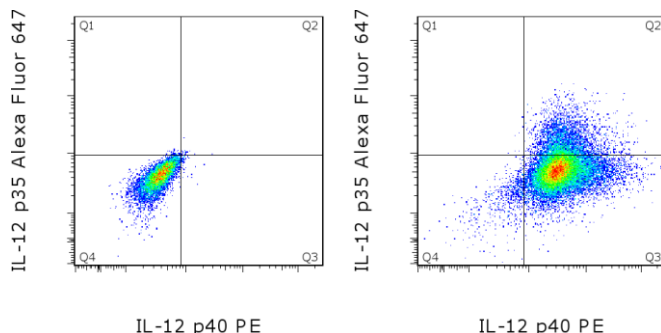


Anti-Mouse IL-12 p35 Alexa Fluor 647 (To Be Discontinued, Refer to Cat. No. 50-7352)

Catalog Number: 51-7352

Also known as: Interleukin-12 p35

RUO: For Research Use Only. Not for use in diagnostic procedures.



In vitro-cultured mouse dendritic cells unstimulated (left) or stimulated with Mouse IFN gamma Recombinant Protein (cat. 14-8311), LPS, and the Imidazoquinoline, R848 (right), in the presence of Protein Transport Inhibitor Cocktail (cat. 00-4980) stained intracellularly with Anti-Mouse IL-12/IL-23 p40 PE (cat. 12-7123) and 0.06 ug of Anti-Mouse IL-12 p35 Alexa Fluor[®] 647. Total viable cells were used for analysis.

Product Information

Contents: Anti-Mouse IL-12 p35 Alexa Fluor 647 (To Be Discontinued, Refer to Cat. No. 50-7352)

REF **Catalog Number:** 51-7352

Clone: 4D10p35

Concentration: 0.2 mg/mL

Host/Isotype: Rat IgG2a, 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.

Batch Code: Refer to vial

Use By: Refer to vial

Description

This 4D10p35 monoclonal antibody reacts with mouse p35, a component of two of the four members of the interleukin (IL)-12 family of cytokines. The IL-12 family members are heterodimeric cytokines composed of an alpha-chain, such as p35, and a beta-chain, such as p40. The alpha-chain proteins are thought to be the limiting factors for secretion of IL-12 family member cytokines, as expression of the alpha-chain is more restricted than that of the beta-chain proteins, and the two subunits may need to be co-expressed in order for cytokine secretion to occur. IL-12 family members are secreted primarily by antigen-presenting cells in response to various TLR agonists and other inflammatory stimuli. The exact types of stimuli present and kinetics of stimulation determine the balance of IL-12 family member production.

The p35 protein was first identified as part of the IL-12 cytokine, which is also known as IL-12p70. Secretion is induced by IFN gamma and agonists of TLR3, 4, or 7 and is inhibited by Th2 cytokines. IL-12 is essential for the differentiation and maintenance of Th1 cells. The other subunit, p40, is expressed in much higher quantities than p35, and may be secreted independently as a monomer or homodimer. Free p40 may act as an antagonist of IL-12 function.

More recently, p35 was also found to dimerize with EB13 (Epstein-Barr Virus-Induced Gene 3) to form IL-35. The biology of IL-35 is incompletely understood, and it is believed to be unique among the IL-12 family members in its expression and function. It is produced by regulatory T cells, and appears to have immunoregulatory functions. IL-35 has been found to suppress the proliferation and function of effector T cells, and has also been observed to induce a regulatory phenotype on naïve CD4⁺ cells cultured in its presence.

Testing of 4D10p35 in the context of IL-35 is currently in process. For additional information, please contact technical support.

Applications Reported

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Catalog Number: 51-7352

Also known as: Interleukin-12 p35

RUO: For Research Use Only. Not for use in diagnostic procedures.

This 4D10p35 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested

This 4D10p35 antibody has been tested by intracellular staining followed by flow cytometric analysis. This can be used at less than or equal to 0.125 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

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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

Collison L and Vignali D. Interleukin-35: Odd one out or part of the family? *Immunol Rev.* 2008 Dec; 226: 248-62.

Yoshimura A, Yoshida H, Miyazaki Y, Kinjyo I, Ishibashi T, Yoshimura T, Takeda A, Hamano S. Two sided roles of IL-27: induction of Th1 differentiation on Naïve CD4+ T cells versus suppression of proinflammatory cytokine production including IL-23-induced IL-17 on activated CD4+ T cells partially through STAT3-dependent mechanism. *J Immunol.* 2006; 177: 5377-85.

Related Products

00-4980 Protein Transport Inhibitor Cocktail (500X)

12-7123 Anti-Mouse IL-12/IL-23 p40 PE (C17.8)

14-8311 Mouse IFN gamma Recombinant Protein

50-4321 Rat IgG2a K Isotype Control eFluor® 660 (Alexa Fluor® 647 Replacement) (eBR2a)

50-7023 Anti-Mouse IL-23 p19 eFluor® 660 (fc23cpg)

51-7359 Anti-Human IL-12 p35 Alexa Fluor® 647 (To Be Discontinued. Refer to Cat. No. 50-7359) (SNKY35)

88-7120 Mouse IL-12/IL-23 total p40 ELISA Ready-SET-Go!®

88-7121 Mouse IL-12 p70 ELISA Ready-SET-Go!®

88-8823 Intracellular Fixation & Permeabilization Buffer (plus Brefeldin A) (previously named IC Fixation & Permeabilization Buffer)

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