

Anti-Mouse IL-23 p19 Purified

Catalog Number: 14-7233

Also Known As: Interleukin-23, p40, p19

RUO: For Research Use Only

Product Information

Contents: Anti-Mouse IL-23 p19 Purified

REF **Catalog Number:** 14-7233

Clone: 5B2

Concentration: 0.5 mg/mL

Host/Isotype: Mouse IgG2b, kappa

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

 **Temperature Limitation:** Store at 2-8°C.

LOT **Batch Code:** Refer to Vial

 **Use By:** Refer to Vial

 **Caution, contains Azide**

Description

The 5B2 antibody reacts with the p19 subunit of mouse IL-23. The 5B2 antibody in combination with the C17.8 antibody yields an improved IL-23 sandwich ELISA with greater sensitivity than was achievable with previous assays. The 5B2 antibody is a non-neutralizing antibody.

IL-23 is a heterodimeric cytokine composed of the p40 subunit of IL-12 disulfide-linked with a protein p19. p19, like p35 of IL-12, is biologically inactive by itself. IL-23 interacts with IL-12Rbeta1 and an additional, novel beta2-like receptor subunit with STAT4 binding domain, termed IL-23R. IL-23 is secreted by activated mouse and human dendritic cells. Biological activities of mouse IL-23 are distinct from those of mouse IL-12. Mouse IL-23 was found not to induce significant amounts of IFN gamma. Mouse IL-23 does induce strong proliferation of memory T cells (but not naïve T cells), whereas IL-12 has no effect on memory cells. Additionally, mouse IL-23 (but not IL-12) can activate mouse memory T cells to produce the proinflammatory cytokine IL-17. Human IL-23 has biological properties which are less distinct from human IL-12; human IL-23 induces proliferation of memory T cells and induces moderate levels of IFN gamma production by naïve and memory T cells, as compared to IL-12.

Applications Reported

The anti-mouse p19 5B2 antibody has been reported for use as the capture antibody for a mouse IL-23 sandwich ELISA, when used in conjunction with the anti-p40 C17.8 antibody as the detector.

Applications Tested

The 5B2 antibody has been tested as the capture antibody in a sandwich ELISA for analysis of mouse IL-23 (p19/p40) protein levels in combination with the biotinylated (p40-specific) C17.8 antibody (13-7123) for detection and recombinant mouse IL-23 (14-8231) as the standard. A suitable range of concentrations of this antibody for ELISA capture is 1-4 µg/ml. A standard curve consisting of doubling dilutions of the recombinant standard over the range of 1000 pg/ml - 8 pg/ml should be included in each ELISA plate.

For specific neutralization of mouse IL-23 protein activity (with no effect on IL-12 p70), the functional grade purified G23-8 antibody is recommended (cat #16-7232).

Related Products

00-0044 ELISA/ELISPOT Coating Buffer Powder

00-4201 1X TMB ELISA Substrate Solution

00-4202 ELISA Diluent Solution (5X)

13-7123 Anti-Mouse IL-12/IL-23 p40 Biotin (C17.8)

18-4100 Avidin HRP

39-8231 Mouse IL-23 Single-Use ELISA RSG Standard

88-7230 Mouse IL-23 ELISA Ready-SET-Go!® (Second generation assay)

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