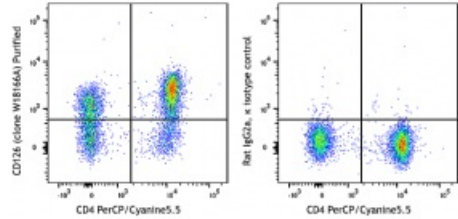


Purified anti-mouse CD126 (IL-6R α)

Catalog # / Size: 1402010 / 500 μ g
Clone: W18166A
Isotype: Rat IgG2a, κ
Immunogen: Mouse IL-6R recombinant protein, 1-357 a.a.
Reactivity: Mouse
Preparation: The antibody was purified by affinity chromatography.
Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Concentration: 0.5 mg/mL



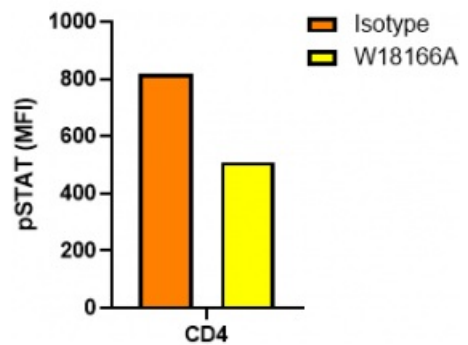
C57BL/6 splenocytes were stained with CD3 FITC, CD4 PerCP/Cyanine5.5, and purified CD126 (IL-6R α) (clone W18166A) (left) or rat IgG2a, κ isotype control (right), followed by anti-rat IgG PE. Dot plots are gated on CD3 positive cells

Applications:

Applications: Flow Cytometry, Blocking

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is \leq 0.25 μ g per million cells in 100 μ L volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Clone W18166A binds to IL-6 receptor alpha, inhibits IL-6/IL-6 receptor interaction and mediated phosphorylation of signal transducer and activator of transcription 3 (STAT3). This clone does not cross-react with rat.



Blocking of IL-6/STAT3 signaling pathway was assessed by intracellular staining of C57BL/6 splenocytes with STAT3 pY705 PE. Cells were incubated with purified CD126 (clone W18166A) or isotype control for 15 minutes, then treated with IL-6. Mean fluorescence intensity (MFI) of STAT3 pY705 PE were gated on CD4 positive cells.

Description: CD126 (IL-6R α) is an 80kD member of the immunoglobulin superfamily that is expressed on activated T and B cells, monocytes, hepatocytes, and plasma cells. High affinity IL-6 receptors are formed by the non-covalent association of CD126 and the IL-6 receptor β chain (CD130 or gp130). CD126 binds IL-6 with low affinity, but does not signal. The β chain (gp130, CD130) does not bind IL-6 by itself, but associates with the α -chain/IL-6 complex to initiate signal transduction. IL-6 binding to the receptor complex results in the stimulation of B and T cells, and hematopoietic precursor proliferation and differentiation.

Antigen Taga T, *et al.* 1997. *Annu Rev Immunol.* 15:797-819.
References: Fitzgerald K, *et al.* 2001. *The Cytokine FactsBook.* Academic Press London.
Boulanger MJ, *et al.* 2003. *Science.* 300:2101-4