TECHNICAL DATA SHEET

PE Anti-Mouse CD115 (c-fms) (AFS98)

Catalog Number: 50-1152

PRODUCT INFORMATION

Contents: PE Anti-Mouse CD115 (c-fms) (AFS98)

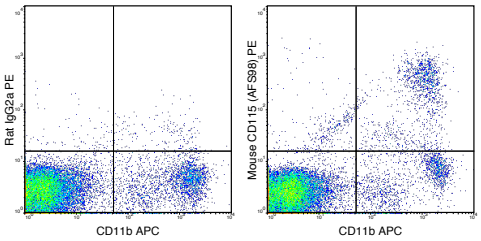
Isotype: Rat IgG2a, kappa

Concentration: 0.2 mg/mL

Clone: AFS98

Reactivity: Mouse

Formulation: 10 mM NaH_2PO_4, 150 mM NaCl, 0.09% NaN_3, 0.1% gelatin, pH7.2



C57Bl/6 peripheral blood cells were stained with APC Anti-Mouse CD11b (20-0112) and 0.125 ug PE Anti-Mouse CD115 (50-1152) (right panel) or 0.125 ug PE Rat IgG2a (left panel).

DESCRIPTION

The AFS98 antibody is specific for mouse CD115, also known as Colony-Stimulating Factor-1 Receptor (CSF-1R), a 145 kDa receptor from the PDGF receptor family. Receptor activation by the ligands IL-34 or CSF-1 (M-CSF) occurs via homodimerization of CD115 and subsequent tyrosine phosphorylation and ubiquitination of intracellular domains. CD115 signaling promotes differentiation of myeloid precursors, as well as the continued regulation of proliferation, survival and function of mononuclear phagocytes, dendritic cells and osteoclasts. While IL-34 and CSF-1 may induce similar cellular responses, they are differentially expressed and as such exert complimentary actions via CD115.The AFS98 antibody may be used for identification of myeloid lineage cells by flow cytometry, and is commonly used for in vivo or in vitro neutralization of CSF-1 Receptor.

PREPARATION & STORAGE

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

APPLICATION NOTES

This antibody preparation has been quality-tested for flow cytometry using mouse spleen cells, or an appropriate cell type (where indicated). The amount of antibody required for optimal staining of a cell sample should be determined empirically in your system.

REFERENCES

Gautier EL, Chow A, Spanbroek R, Marcelin G, Greter M, Jakubzick C, Bogunovic M, Leboeuf M, van Rooijen N, Habenicht AJ, Merad M, and Randolph GJ. 2012. J. Immunol. 189: 2614-2624. (Flow cytometry)Nakamichi Y, Mizoguchi T, Arai A, Kobayashi Y, Sato M, Penninger JM, Yasuda H, Kato, S, DeLuca HF, Suda T, Udagawa N, and Takahashi N. Proc. Natl. Acad. Sci. 109: 10006-10011. (in vitro blocking)Okuno Y, Nakamura-Ishizu A, Kishi K, Suda T, and Kubota Y. 2011. Blood. 117: 5264-5272. (in vivo blocking)Fixley FJ, Xiong Y, Yu R Y-L, Sahai EA, Stanley ER, and Ye BH. 2005. J. Cell Sci. 118: 1873-1883. (Western blot)

NOTE: Please choose the appropriate format for each application. Citations are provided as a convenience to you; please consult Materials and Methods sections for additional details about the use of any product in these publications.