

**Biotin anti-mouse CD115 (CSF-1R)**

**Catalog # / Size:** 1277540 / 500 µg  
1277535 / 50 µg

**Clone:** AFS98

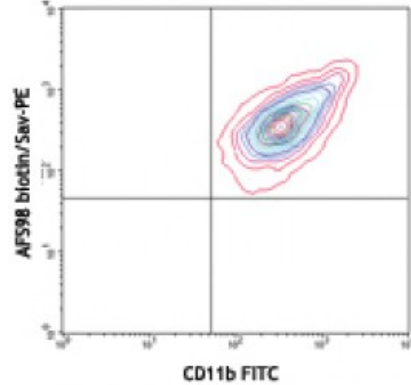
**Isotype:** Rat IgG2a, κ

**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.5



Thioglycolate-elicited BALB/c mouse peritoneal macrophages stained with CD11b FITC and AFS98 biotin (top) or rat IgG2a,κ biotin (bottom), then detected with Sav-PE

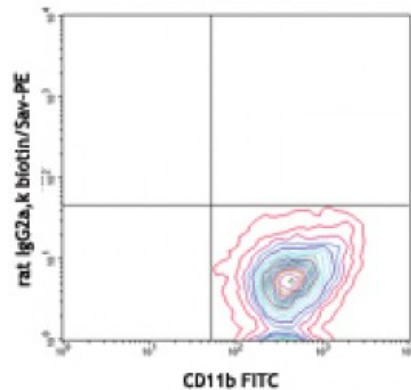
**Applications:**

**Applications:** Flow Cytometry

**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 ≤ 0.25 microg per 10<sup>6</sup> cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Additional reported applications (for the relevant formats) include: blocking of ligand binding<sup>1</sup>. The LEAF™ purified antibody (Endotoxin <0.1 EU/microg, Azide-Free, 0.2 µm filtered) is recommended for functional assays.

- Application References:**
1. Sudo T, *et al.* 1995. *Oncogene* 11:2469.
  2. Murayama T, *et al.* 1999. *Circulation* 99:1740.
  3. Jaeger BN, *et al.* 2012. *J. Exp. Med.* 209:565. [PubMed](#)
  4. Zhang J, *et al.* 2015. *PLoS One.* 10:130441. [PubMed](#)



**Description:** CSF-1R, also known as CD115 and M-CSFR, is a single-pass type I membrane protein and member of the platelet-derived growth factor receptor family. This c-fms (Fms proto-oncogene) gene product's natural ligands include M-CSF and IL-34. Structural studies of CD115 have described an Ig-like extracellular domain, a transmembrane domain, an intracellular juxtamembrane domain, a split tyrosine kinase domain, and a C-terminal tail receptor. Receptor activation induces homodimerization in addition to phosphorylation and ubiquitination of intracellular residues. CD115 directly influences tissue macrophage and osteoclast differentiation and proliferation. It is expressed on monocytes/macrophages,

peritoneal exudate cells, plasmacytoid and conventional dendritic cells, and osteoclasts.

**Antigen**  
**References:**

1. Sudo T, *et al.* 1995 *Oncogene* 11:2469.
2. Murayama T, *et al.* 1999 *Circulation* 99:1740.
3. Goswami S, *et al.* 2005 *Cancer Res.* 65:5278.
4. Yu W, *et al.* 2008 *J. Leuko. Bio*