SONY

Product Data Sheet

Alexa Fluor® 488 anti-mouse CD115 (CSF-1R)

Catalog # / Size: 1277555 / 25 µg
1277560 / 100 µg

Clone: AFS98

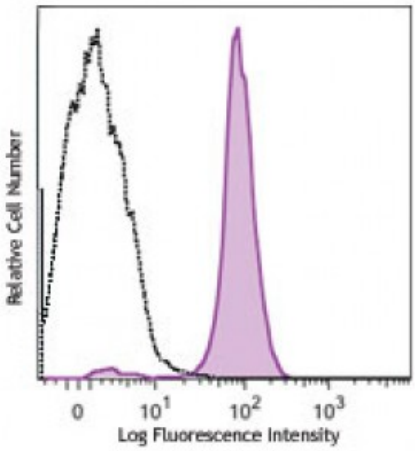
Isotype: Rat IgG2a, κ

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 488 under optimal conditions.

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

Concentration: 0.5



Thioglycolate-elicited C57BL/6 mouse peritoneal macrophages stained with CD115 (clone AFS98) Alexa Fluor® 488 (filled histogram) or rat IgG2a, κ Alexa Fluor® 488 control (open histogram).

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 ≤1.0 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.

Application Notes: Additional reported applications (for the relevant formats) include: blocking of ligand binding1. 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

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

1. Sudo T, *et al.* 1995 *Oncogene* 11:2469.

References: 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*