Alexa Fluor® 647 anti-mouse CD115 (CSF-1R)

Catalog # / Size: 1277650 / 100 μg

1277645 / 25 μg

Clone: AFS98

Isotype: Rat IgG2a, κ

Reactivity: Mouse

Preparation: The antibody was purified by affinity

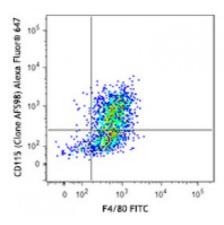
chromatography and conjugated with Alexa Fluor® 647 under optimal

conditions.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.5



Thioglycolate-elicited BALB/c mouse peritoneal macrophages were stained with F4/80 FITC and CD115 (clone AFS98) Alexa Fluor® 647 (top) or rat IgG2a, κ Alexa Fluor® 647 isotype control (bottom).

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 ≤0.125 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at

633 nm / 635 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:

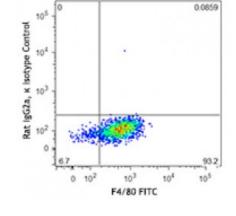
1. Sudo T, et al. 1995. Oncogene 11:2469.

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 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