## **Product Data Sheet**

## PE/Dazzle™ 594 anti-mouse CD115 (CSF-1R)

**Catalog # / Size:** 1277635 / 25 μg

1277640 / 100 µg

Clone: AFS98

**Isotype:** Rat IgG2a, κ

Reactivity: Mouse

**Preparation:** The antibody was purified by affinity

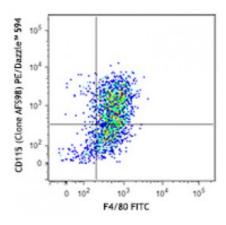
chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle™ 594 and

unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

**Concentration:** 0.2



Thioglycolate-elicited BALB/c mouse peritoneal macrophages were stained with F4/80 FITC and CD115 (clone AFS98) PE/Dazzle™ 594 (top) or rat IgG2a, κ PE/Dazzle™ 594 isotype control (bottom).

**F4/80 FITC** 

105

104

103

Rat IgG2a, k Isotype Control

## **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  $\leq 0.125$  microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

\* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum

emission of 610 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