

**PE/Cy7 anti-human CD115 (CSF-1R)**

**Catalog # / Size:** 2336540 / 100 tests  
2336535 / 25 tests

**Clone:** 9-4D2-1E4

**Isotype:** Rat IgG1,  $\kappa$

**Immunogen:** C-fms transduced Kirsten strain murine sarcoma virus transformed NRK cells.

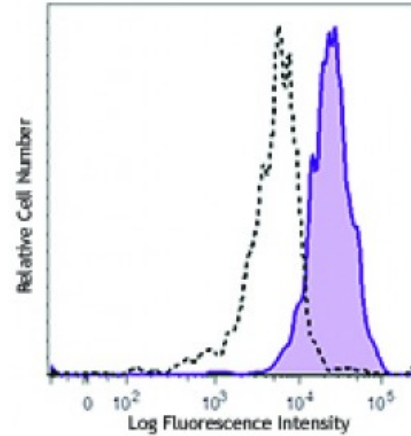
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Workshop Number:** V MA199

**Concentration:** Lot-specific



Human peripheral blood monocytes were stained with CD115 (clone 9-4D2-1E4) PE/Cy7 (filled histogram) or rat IgG1,  $\kappa$  PE isotype 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 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

**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. 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 ubiquitinylation of intracellular residues. The natural ligands of CD115 include M-CSF and IL-34. CD115 directly influences tissue macrophage and osteoclast differentiation and proliferation. It is expressed on monocytes/macrophages, plasmacytoid and conventional dendritic cells, and osteoclasts.

**Antigen References:**

1. Sherr CJ, *et al.* 1989. *Blood* 73:1786
2. Roussel MF, *et al.* 1991. *Nature* 353:361.
3. Roussel MF, *et al.* 1989 *P. Natl. Acad. Sci. USA* 86:7924.