

**PE/Cy7 anti-human CD163**

**Catalog # / Size:** 2232570 / 100 tests  
2232565 / 25 tests

**Clone:** RM3/1

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

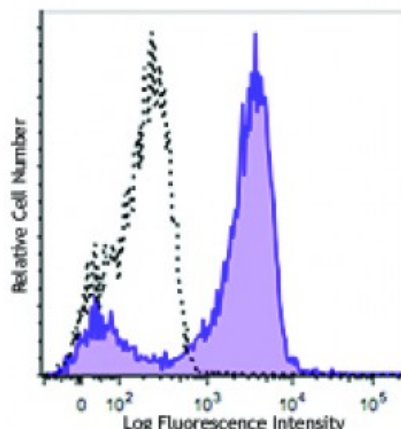
**Immunogen:** Human monocytes

**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).

**Concentration:** Lot-specific



Human peripheral blood monocytes were incubated overnight with IL-10 and then stained with anti-human CD163 (clone RM3/1) PE/Cy7 (filled histogram) or mouse IgG1,  $\kappa$  PE/Cy7 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.

**Application Notes:** Clone RM3/1 binds to domain 9 of CD163. Additional reported applications (for the relevant formats) include: immunofluorescence<sup>7</sup>.

**Application References:**

1. Högger P, *et al.* 1998. *J. Immunol.* 161:1883. (FC)
2. Zwadlo G, *et al.* 1987. *Exp. Cell Biol.* 55:295. (FC)
3. Buechler C, *et al.* 2000. *J. Leukoc. Biol.* 67:97. (FC)
4. Puig-Kroger A, *et al.* 2009. *Cancer Res.* 69:9395. (FC) [PubMed](#)
5. Madsen M, *et al.* 2004. *J. Biol. Chem.* 279:51561. (FC)
6. Jones K, *et al.* 2013. *Clin Cancer Res.* 19:731. (FC) [PubMed](#)
7. Stewart DA, *et al.* 2012. *Mol. Cancer Res.* 10:727. (IF)

**Description:** CD163 is a member of the group B scavenger receptor cysteine-rich superfamily, also known as GHI/61, M130, RM3/1, p155, hemoglobin-haptoglobin complex receptor, or macrophage-associated antigen. It is a 134 kD (non-reduced)/155 kD (reduced) glycoprotein primarily expressed on macrophages, Kuffer cells, monocytes, subset of dendritic cells, and a subset of hematopoietic stem/progenitor cells. CD163 binds to haptoglobin-hemoglobin complex and TWEAK, and plays a role in clearing hemoglobin and regulating cytokine production by macrophages. Membrane CD163 can be cleaved by metalloproteinases (MMP), resulting in a soluble form. Elevated serum level of sCD163 has been implicated in many kinds of inflammation diseases.

**Antigen References:**

1. Roth J, *et al.* 1994. *Transplantation.* 57:127.
2. Van den Heuvel MM, *et al.* 1999. *J. Leukoc. Biol.* 66:858.

3. *Sulahian TH, et al. 2000. Cytokines 12:1312.*
4. *Fabrick BO, et al.*