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# Product Data Sheet

# Purified anti-human CD68

**Catalog # / Size:** 333801 / 25 µg
333802 / 100 µg

**Clone:** Y1/82A

**Isotype:** Mouse IgG2b, κ

**Workshop Number:** VI MR23

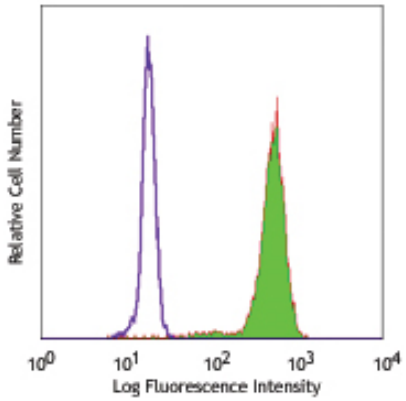
**Reactivity:** Human

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

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

**Concentration:** 0.5 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C.




*Human peripheral blood monocytes intracellularly stained with purified Y1/82A, followed by anti-mouse IgG FITC*

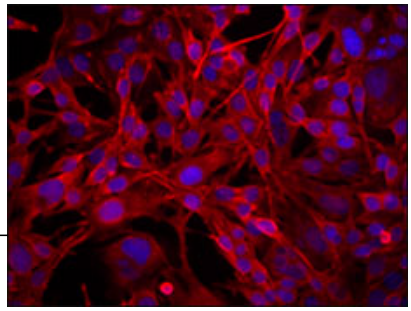
# Applications:

**Applications:** ICFC - *Quality tested*
IF - *Validated*
IHC - *Reported in the literature*

**Recommended Usage:** Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤0.125 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Additional reported application: immunohistochemical staining of frozen tissue sections.

**Application References:**
1. Doussis IA, *et al.* 1993. *J. Clin. Pathol.* 46:334.
2. Davey FR, *et al. 1988. J. Clin. Pathol. 41:753.*



*MDA-MB-231 breast cancer cells were stained with anti-human CD68 (clone Y1/82A) using 1:100 dilution, followed by DyLight™ 649 anti-mouse Ig secondary antibody (red) plus DAPI staining for nuclei (blue). Cells were fixed with 4% PFA, permeabilized with 0.1% Triton X-100, blocked with 10% serum, and incubated O/N at 4°C. Images were taken under 20x (filter set: EX 647/10x, Dichroic 665LP, EM 700/70x) at exposure 4s. Data provided by John Nolan and Er Liu, La Jolla Bioengineering Institute.*

**Description:** CD68 is a 110 kD glycoprotein, known as macrosialin, belongs to sialomucin family and is closely related to the family of acidic, highly glycosylated lysosomal-associated membrane proteins (lamps). CD68 is predominately expressed in cytoplasmic granules of monocytes/macrophages, dendritic cells, and granulocytes. It is one of the useful myeloid cell markers. Further studies have shown that CD68 is also expressed by a subset of hematopoietic progenitors, gamma/delta T cells, NK cells, LAK cells, subset of B cells, fibroblasts, and endothelial cells. The biological function of CD68 is still unknown.

**Antigen References:**
1. Holness CL and Simmons DL. 1993. *Blood* 81:1607.
2. Gottfried E, *et al.* 2008. *Scand. J. Immunol.* 67:453.
3. Hameed A, *et al.* 1994. *Hum. Pathol.* 25:872.

**Related Products:**

| Product | Clone | Application |
|---|---|---|
| Purified Mouse IgG2b, κ Isotype Ctrl | MG2b-57 | FC, ICC, ICFC, IF, IHC, IP, WB |
| Permeabilization Wash Buffer (10X) | | ICC, ICFC, IHC |
| Cell Staining Buffer | | FC, ICC, ICFC |
| RBC Lysis Buffer (10X) | | FC, ICFC |



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