

**Alexa Fluor® 647 anti-human CD14**

**Catalog # / Size:** 2228060 / 100 tests  
2228055 / 25 tests

**Clone:** HCD14

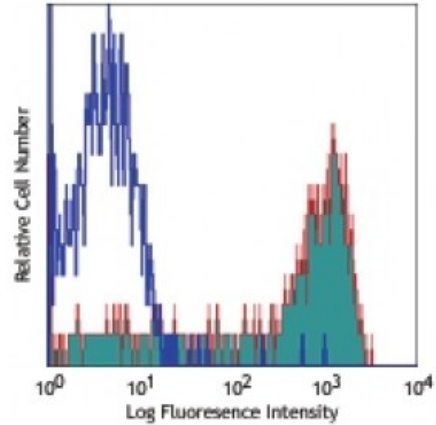
**Isotype:** Mouse IgG1, κ

**Reactivity:** Human

**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 and 0.2% (w/v) BSA (origin USA).

**Concentration:** Lot-specific

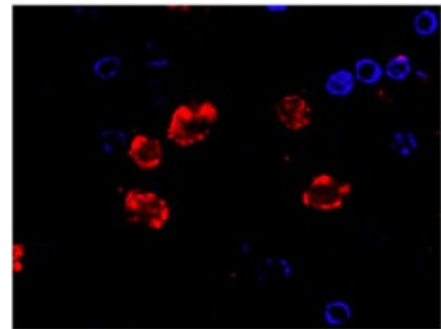


Human peripheral blood monocytes stained with HCD14 alexa Fluor® 647

**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.



Human peripheral blood mononuclear cells were fixed with 2% paraformaldehyde (PFA) and then stained with 5 microg/ml CD14 (clone HCD14) Alexa Fluor® 647 (red) and 5 microg/ml CD3 (clone OKT3) Brilliant Violet 421™ (blue) for 30 minutes at room temperature.

\* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633nm / 635nm.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunofluorescence microscopy. This clone was tested in-house and does not work on formalin fixed paraffin-embedded (FFPE) tissue.

**Application References:**

1. McMichael A, *et al.* 1987. Leucocyte Typing III. Oxford University Press. New York.
2. Knapp W, *et al.* Eds. 1989. Leucocyte Typing IV. Oxford University Press. New York.
3. Schlossman S, *et al.* Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.

**Description:** CD14 is a 53-55 kD glycosylphosphatidylinositol (GPI)-linked membrane glycoprotein also known as LPS receptor. CD14 is expressed at high levels on monocytes and macrophages, and at lower levels on granulocytes. Some dendritic cell populations such as interfollicular dendritic cells, reticular dendritic

cells, and Langerhans cells have also been reported to express CD14. As a high-affinity receptor for LPS, CD14 is involved in the clearance of gram-negative pathogens and in the upregulation of adhesion molecules and cytokines expression in monocytes and neutrophils.

- Antigen**  
**References:**
1. Stocks S, *et al.* 1990. *Biochem. J.* 268:275.
  2. Wright S, *et al.* 1990. *Science* 249:1434.