

Alexa Fluor® 647 anti-human CD14 Antibody

Catalog# / Size	325611 / 25 tests 325612 / 100 tests
Clone	HCD14
Regulatory Status	RUO
Other Names	LPS receptor
Isotype	Mouse IgG1, κ
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.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested ICC - Verified
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 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. * Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633nm / 635nm. Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation. View full statement regarding label licenses
Excitation Laser	Red Laser (633 nm)
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 (PubMed link indicates BioLegend citation)	<ol style="list-style-type: none"> 1. McMichael A, <i>et al.</i> 1987. Leucocyte Typing III. Oxford University Press. New York. 2. Knapp W, <i>et al.</i> Eds. 1989. Leucocyte Typing IV. Oxford University Press. New York. 3. Schlossman S, <i>et al.</i> Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.
Product Citations	<ol style="list-style-type: none"> 1. Fu J <i>et al.</i> 2019. Cell stem cell. 24(2):227-239 . PubMed 2. Meehan S, <i>et al.</i> 2019. Commun Biol. 2:229. PubMed 3. Tatsuno K, <i>et al.</i> 2019. Cell Death Dis. 10:578. PubMed

4. Witkowski MT, *et al.* 2020. *Cancer Cell*. 37:867. [PubMed](#)
5. Singh A, *et al.* 2020. *Mol Oncol*. 1.901388889. [PubMed](#)
6. Huynh L, *et al.* 2016. *Sci Rep*. 6:31959. [PubMed](#)
7. Hadadi E, *et al.* 2016. *Sci Rep*. 6:39035. [PubMed](#)
8. Flak MB, *et al.* 2020. *J Clin Invest*. 130:359. [PubMed](#)

RRID AB_830684 (BioLegend Cat. No. 325611)
 AB_830685 (BioLegend Cat. No. 325612)

Antigen Details

Structure	GPI-linked membrane glycoprotein, 53-55 kD
Distribution	Monocytes, macrophages, granulocytes (low)
Function	LPS receptor, clearance of Gram-negative pathogens
Ligand/Receptor	LPS
Cell Type	Granulocytes, Macrophages, Monocytes, Neutrophils
Biology Area	Cell Biology, Immunology, Innate Immunity, Neuroinflammation, Neuroscience
Molecular Family	CD Molecules
Antigen References	1. Stocks S, <i>et al.</i> 1990. <i>Biochem. J.</i> 268:275. 2. Wright S, <i>et al.</i> 1990. <i>Science</i> 249:1434.
Gene ID	929

Related Protocols

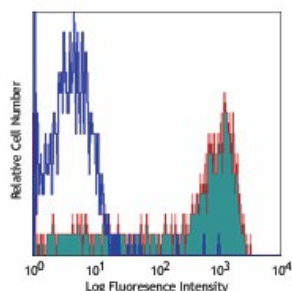
[Cell Surface Flow Cytometry Staining Protocol](#)

[Immunocytochemistry Staining Protocol](#)

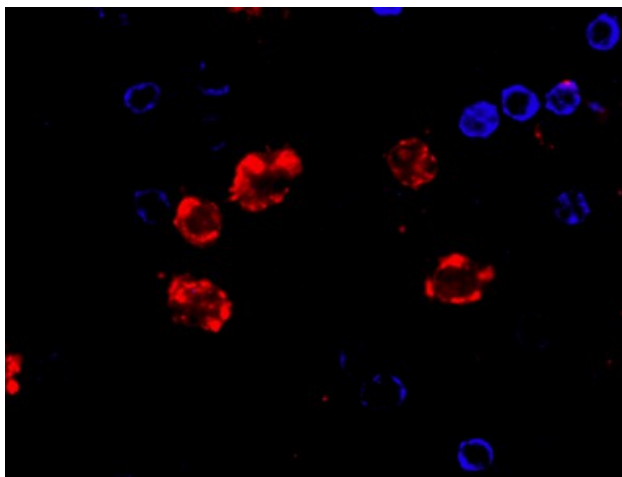
Other Formats

PerCP anti-human CD14, Purified anti-human CD14, FITC anti-human CD14, PE anti-human CD14, APC anti-human CD14, Alexa Fluor® 488 anti-human CD14, Alexa Fluor® 647 anti-human CD14, Alexa Fluor® 700 anti-human CD14, Pacific Blue™ anti-human CD14, PE/Cyanine7 anti-human CD14, APC/Cyanine7 anti-human CD14, PerCP/Cyanine5.5 anti-human CD14, Biotin anti-human CD14, Brilliant Violet 421™ anti-human CD14, Alexa Fluor® 594 anti-human CD14, PE/Dazzle™ 594 anti-human CD14, Spark Blue™ 574 anti-human CD14

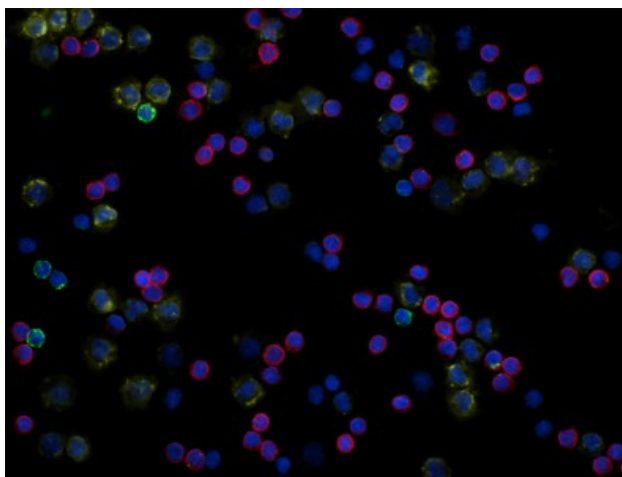
Product Data



Human peripheral blood monocytes stained with HCD14 alexa Fluor® 647



Human peripheral blood mononuclear cells were fixed with 2% paraformaldehyde (PFA) and then stained with 5 µg/mL CD14 (clone HCD14) Alexa Fluor® 647 (red) and 5 µg/mL CD3 (clone OKT3) Brilliant Violet 421™ (blue) for 30 minutes at room temperature. The image was captured by 40X objective.



Human peripheral blood mononuclear cells were fixed with 2% paraformaldehyde (PFA), and then stained with 10 µg/mL CD14 (clone HCD14) Alexa Fluor® 647 (yellow), 10 µg/mL CD19 (clone HIB19) Alexa Fluor® 488 (green), and 10 µg/mL CD3 (clone UCHT1) Alexa Fluor® 594 (red) for 30 minutes at room temperature. Nuclei were counterstained with DAPI (blue). The image was captured with a 40X objective.

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