

Alexa Fluor® 594 anti-human CD14 Antibody

Catalog# / Size	325630 / 100 µg
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.
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 594 under optimal conditions.
Concentration	0.5 mg/mL
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	ICC - Quality tested FC - Verified
Recommended Usage	<p>Each lot of this antibody is quality control tested by immunocytochemistry. For immunocytochemistry, a concentration range of 2.5 - 10 µg/mL is recommended. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>* Alexa Fluor® 594 has an excitation maximum of 590 nm, and a maximum emission of 617 nm.</p> <p>Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p>View full statement regarding label licenses</p>
Excitation Laser	Green Laser (532 nm)/Yellow-Green Laser (561 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	<ol style="list-style-type: none"> McMichael A, <i>et al.</i> 1987. Leucocyte Typing III. Oxford University Press. New York. Knapp W, <i>et al.</i> Eds. 1989. Leucocyte Typing IV. Oxford University Press. New York. Schlossman S, <i>et al.</i> Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.
(PubMed link indicates BioLegend citation)	
Product Citations	<ol style="list-style-type: none"> McCoy C, <i>et al.</i> 2017. PLoS Negl Trop Dis. 10.1371/journal.pntd.0005279. PubMed Burel JG, <i>et al.</i> 2019. Elife. 8. PubMed Han P, <i>et al.</i> 2020. Sci Adv. 6:eaaaz1580. PubMed Bzymek R, <i>et al.</i> 2016. Sci Rep. 6: 25016: . PubMed

RRID

AB_2563225 (BioLegend Cat. No. 325630)

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

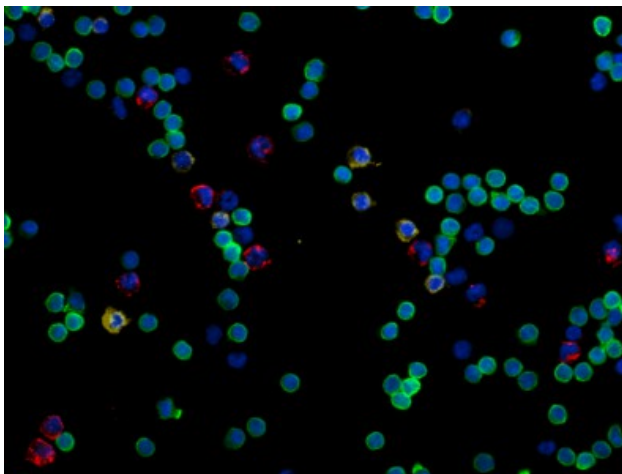
[Cell Surface Flow Cytometry Staining Protocol](#)

[Immunocytochemistry Staining Protocol](#)

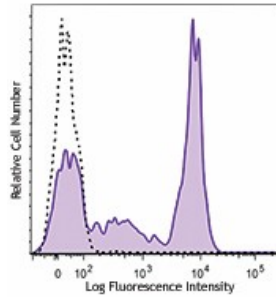
Other Formats

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 mononuclear cells were fixed with 2% paraformaldehyde (PFA) and then stained with 10 µg/ml anti-human CD14 (clone HCD14) Alexa Fluor® 594 (red), 10 µg/ml CD3 (clone UCHT1) Alexa Fluor® 488 (green), and 10 µg/ml CD8 (clone RPA-T8) Alexa Fluor® 647 (yellow) for 30 minutes at room temperature. Nuclei were counterstained with DAPI (blue). The image was captured with a 40X objective.



Human peripheral blood monocytes were stained with CD14 (clone HCD14) Alexa Flour® 594 (filled histogram) or mouse IgG1, κ Alexa Flour® 594 isotype control (open histogram). The data was acquired by BD LSRFortessa™ cell analyzer equipped with the Yellow-Green Laser (561 nm).

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