

Brilliant Violet 650™ anti-human CD14 Antibody

Catalog# / Size	325641 / 25 tests 325642 / 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 Brilliant Violet 650™ under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool.)
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
Recommended Usage	<p>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. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>Brilliant Violet 650™ excites at 405 nm and emits at 645 nm. The bandpass filter 660/20 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 650™ is a trademark of Sirigen Group Ltd.</p> <p>Learn more about Brilliant Violet™.</p> <p>This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.</p>
Excitation Laser	Violet Laser (405 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)

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.

RRID AB_3662352 (BioLegend Cat. No. 325641)
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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

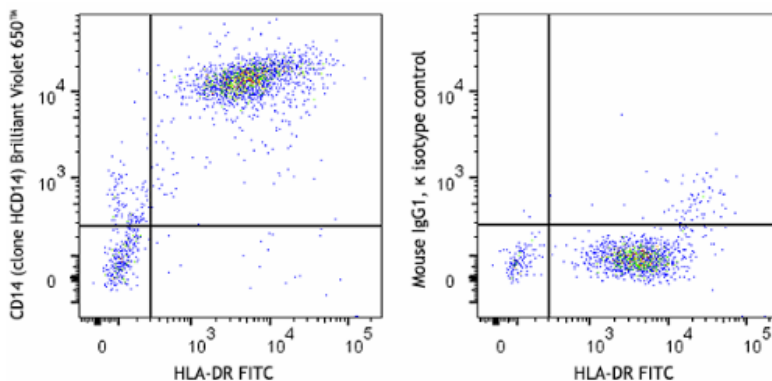
Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

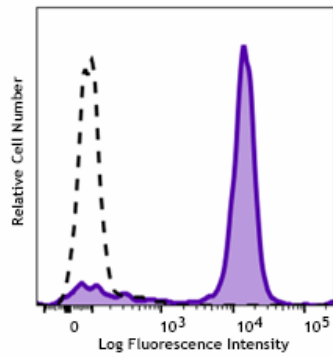
Other Formats

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, Brilliant Violet 510™ anti-human CD14, Brilliant Violet 605™ anti-human CD14, Brilliant Violet 650™ anti-human CD14, Brilliant Violet 785™ anti-human CD14, StarBright UltraViolet 740 anti-human CD14

Product Data



Human peripheral blood monocytes were stained with anti-human HLA-DR (clone L243) FITC and anti-human CD14 (clone HCD14) Brilliant Violet 650™ (left) or mouse IgG1, κ Brilliant Violet 650™ isotype control (right).



Human peripheral blood monocytes stained with anti-human CD14 (clone HCD14) Brilliant Violet 650™ (filled histogram) or mouse IgG1, κ Brilliant Violet 650™ isotype control (open histogram).

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