

Brilliant Violet 510™ anti-human CD14 Antibody

Catalog# / Size	367123 / 25 tests 367124 / 100 tests
Clone	63D3
Regulatory Status	RUO
Other Names	Monocyte differentiation antigen CD14, myeloid cell-specific leucine-rich glycoprotein, LPS receptor
Isotype	Mouse IgG1, κ
Description	CD14 is a 53-55 kD glycosylphosphatidylinositol (GPI)-linked membrane glycoprotein that is also known as the 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 cytokine expression in monocytes and neutrophils.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Purified human peripheral blood monocytes.
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 510™ 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
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.</p> <p>Brilliant Violet 510™ excites at 405 nm and emits at 510 nm. The bandpass filter 510/50 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 510™ 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 References	1. Fridlender ZG, <i>et al.</i> 1999. <i>Hum. Immunol.</i> 11:1028.

(PubMed link indicates BioLegend citation)

2. Devitt A, *et al.* 1998. *Nature* 6675:505.

Product Citations

1. Bergamaschi L, *et al.* 2021. *Immunity*. 54(6):1257-1275.e8. [PubMed](#)
2. Grifoni A, *et al.* 2020. *Cell*. 181(7):1489-1501.e15.. [PubMed](#)
3. Pucino V, *et al.* 2020. *Cell Metabolism*. 30(6):1055-1074.e8.. [PubMed](#)
4. Rydzynski Moderbacher C, *et al.* 2020. *Cell*. 183(4):996-1012.e19. [PubMed](#)
5. Rydzynski Moderbacher C, *et al.* 2022. *J Clin Invest.* .: [PubMed](#)

RRID

AB_2716228 (BioLegend Cat. No. 367123)

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Antigen Details

Structure	GPI-linked membrane glycoprotein.
Distribution	Monocytes, macrophages, dendritic cells, and granulocytes.
Function	LPS receptor, clearance of Gram-negative pathogens.
Interaction	LPS.
Ligand/Receptor	LPS.
Cell Type	Dendritic cells, Granulocytes, Macrophages, Monocytes, Neutrophils
Biology Area	Cell Biology, Immunology, Neuroinflammation, Neuroscience
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	<ol style="list-style-type: none">1. Stocks SC, <i>et al.</i> 1990. <i>Biochem. J.</i> 268:275.2. Wright SD, <i>et al.</i> 1990. <i>Science</i> 4975:1431.
Gene ID	929

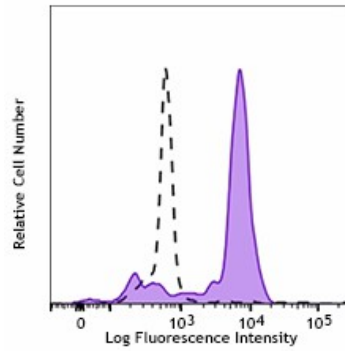
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human CD14, PE anti-human CD14, Biotin anti-human CD14, APC/Cyanine7 anti-human CD14, PE/Cyanine7 anti-human CD14, PerCP/Cyanine5.5 anti-human CD14, Alexa Fluor® 700 anti-human CD14, APC anti-human CD14, FITC anti-human CD14, APC/Fire™ 750 anti-human CD14, Pacific Blue™ anti-human CD14, Brilliant Violet 510™ anti-human CD14, Brilliant Violet 605™ anti-human CD14, Alexa Fluor® 647 anti-human CD14, Alexa Fluor® 488 anti-human CD14, TotalSeq™-A0051 anti-human CD14, PE/Dazzle™ 594 anti-human CD14, Brilliant Violet 750™ anti-human CD14, TotalSeq™-C0051 anti-human CD14, Brilliant Violet 421™ anti-human CD14, Brilliant Violet 785™ anti-human CD14, Brilliant Violet 711™ anti-human CD14, TotalSeq™-B0051 anti-human CD14, Spark Blue™ 550 anti-human CD14, Spark NIR™ 685 anti-human CD14, PE/Fire™ 640 anti-human CD14, APC/Fire™ 810 anti-human CD14, PerCP anti-human CD14, PE/Fire™ 700 anti-human CD14

Product Data



Human peripheral blood monocytes were stained with Brilliant Violet™ 510 anti-human CD14 (clone 63D3, closed histogram) or Brilliant Violet™ 510 mouse IgG1, κ isotype control (open histogram).

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