

Brilliant Violet 510™ anti-mouse CD14 Antibody

Catalog# / Size	123323 / 50 µg
Clone	Sa14-2
Regulatory Status	RUO
Other Names	LPS receptor
Isotype	Rat IgG2a, κ
Description	CD14 is a 53-55 kD glycosylphosphatidylinositol (GPI)-linked membrane glycoprotein also known as LPS receptor. CD14 is expressed on macrophages, dendritic cells, Kupffer cells, hepatocytes, and granulocytes. As a high-affinity receptor for LPS-LBP (LPS-binding protein) complex, CD14, in association with Toll-like Receptor 4 (TLR4) or 2 (TLR2), is involved in the clearance of gram-negative pathogens.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Mouse thymus or spleen
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	0.2 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	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 ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.</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)
Product Citations	<ol style="list-style-type: none">1. Samarchith P Kurup <i>et al.</i> 2019. Cell host & microbe. 25(4):565-577 . PubMed2. Hartwig T <i>et al.</i> 2018. Cell reports. 25(13):3564-3572 . PubMed3. Morris AB, <i>et al.</i> 2020. Immunity. 52(1):136-150.e6.. PubMed4. Izumi G, <i>et al.</i> 2021. Nat Commun. 12:5029. PubMed5. Maller O, <i>et al.</i> 2020. Nat Mater. 20:548. PubMed

Antigen Details

Structure	GPI-linked membrane glycoprotein, 53-55 kD
Distribution	macrophages, dendritic cells, kupffer cells, hepatocytes
Function	LPS receptor, clearance of Gram-negative pathogens
Ligand/Receptor	LPS
Cell Type	Dendritic cells, Macrophages
Biology Area	Cell Biology, Immunology, Innate Immunity, Neuroinflammation, Neuroscience
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	<ol style="list-style-type: none">1. Stocks S, <i>et al.</i> 1990. <i>Biochem. J.</i> 268:275.2. Akashi S, <i>et al.</i> 2003. <i>J. Exp. Med.</i> 198:1035.3. Matsuura K, <i>et al.</i> 1994. <i>J. Exp. Med.</i> 179:1671.4. Liu S, <i>et al.</i> 1998. <i>Infect. Immun.</i> 66:5089.
Gene ID	12475

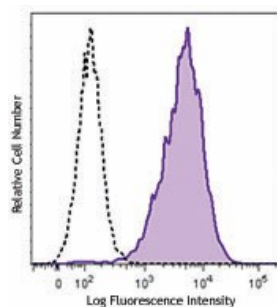
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-mouse CD14, Biotin anti-mouse CD14, FITC anti-mouse CD14, PE anti-mouse CD14, APC anti-mouse CD14, PerCP/Cyanine5.5 anti-mouse CD14, PE/Cyanine7 anti-mouse CD14, APC/Cyanine7 anti-mouse CD14, Purified anti-mouse CD14 (Maxpar® Ready), Brilliant Violet 510™ anti-mouse CD14, Brilliant Violet 421™ anti-mouse CD14, Alexa Fluor® 647 anti-mouse CD14, PE/Dazzle™ 594 anti-mouse CD14, APC/Fire™ 750 anti-mouse CD14, TotalSeq™-A0424 anti-mouse CD14, TotalSeq™-C0424 anti-mouse CD14, TotalSeq™-B0424 anti-mouse CD14, Brilliant Violet 605™ anti-mouse CD14, Brilliant Violet 785™ anti-mouse CD14 Antibody

Product Data



Thioglycollate-elicited BALB/c mouse peritoneal macrophages were stained with CD14 (clone Sa14-2) Brilliant Violet 510™ (filled histogram) or rat IgG2a, κ Brilliant Violet 510™ isotype control (open histogram).

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