

## Brilliant Violet 421™ anti-human CD14 Antibody

<b>Catalog# / Size</b>	367143 / 25 tests 367144 / 100 tests
<b>Clone</b>	63D3
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Monocyte differentiation antigen CD14, myeloid cell-specific leucine-rich glycoprotein, LPS receptor
<b>Isotype</b>	Mouse IgG1, κ
<b>Description</b>	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

---

<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Purified human peripheral blood monocytes.
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	<p>Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a>. 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 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.</p> <p><a href="#">Learn more about Brilliant Violet™.</a></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>
<b>Excitation Laser</b>	Violet Laser (405 nm)
<b>Application References</b>	1. Fridlender ZG, <i>et al.</i> 1999. <i>Hum. Immunol.</i> 11:1028. 2. Devitt A, <i>et al.</i> 1998. <i>Nature</i> 6675:505.
<b>(PubMed link indicates BioLegend citation)</b>	

## Product Citations

- Schloss MJ, *et al.* 2022. Nat Immunol. 23:605. [PubMed](#)
- Rittchen S, *et al.* 2021. Int J Mol Sci. 22:. [PubMed](#)
- Holokai L, *et al.* 2020. Cancers (Basel). 12:00. [PubMed](#)
- Seery V, *et al.* 2021. EBioMedicine. 67:103357. [PubMed](#)
- Gourvest M, *et al.* 2021. Leukemia. . [PubMed](#)
- Faissner S, *et al.* 2022. Front Immunol. 13:980526. [PubMed](#)

## RRID

AB\_2810579 (BioLegend Cat. No. 367143)  
AB\_2810580 (BioLegend Cat. No. 367144)

## Antigen Details

<b>Structure</b>	GPI-linked membrane glycoprotein.
<b>Distribution</b>	Monocytes, macrophages, dendritic cells, and granulocytes.
<b>Function</b>	LPS receptor, clearance of Gram-negative pathogens.
<b>Interaction</b>	LPS.
<b>Ligand/Receptor</b>	LPS.
<b>Cell Type</b>	Dendritic cells, Granulocytes, Macrophages, Monocytes, Neutrophils
<b>Biology Area</b>	Cell Biology, Immunology, Neuroinflammation, Neuroscience
<b>Molecular Family</b>	Adhesion Molecules, CD Molecules
<b>Antigen References</b>	<ol style="list-style-type: none"><li>Stocks SC, <i>et al.</i> 1990. <i>Biochem. J.</i> 268:275.</li><li>Wright SD, <i>et al.</i> 1990. <i>Science</i> 4975:1431.</li></ol>

## Gene ID

[929](#)

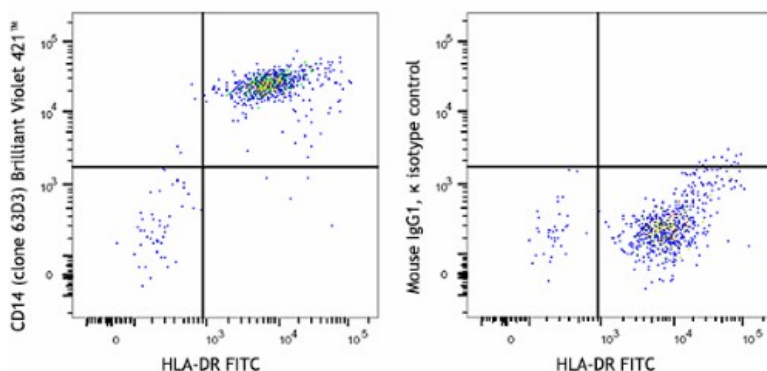
## Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

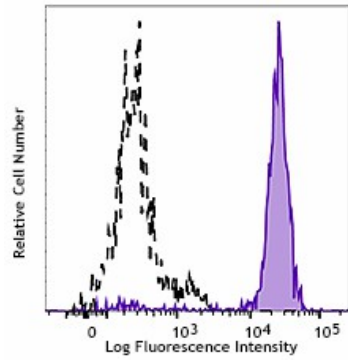
## Other Formats

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 HLA-DR FITC and Brilliant Violet 421™ anti-human CD14 (clone 63D3) (left) or Brilliant Violet 421™ mouse IgG1, κ isotype control (right).



Human peripheral blood monocytes were stained with Brilliant Violet 421™ anti-human CD14 (clone 63D3) (filled histogram) or Brilliant Violet 421™ mouse IgG1,  $\kappa$  isotype control (open histogram).

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

\*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, [www.biolegend.com/ordering#license](http://www.biolegend.com/ordering#license)). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 [www.biolegend.com](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587