



Brilliant Violet 605™ anti-human CD14 Antibody

Catalog# / Size 367125 / 25 tests

367126 / 100 tests

Clone 63D3

Other Names Monocyte differentiation antigen CD14, myeloid cell-specific leucine-rich glycoprotein, LPS

receptor

RUO

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

Regulatory Status

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 605™

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 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.

Brilliant Violet 605™ excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 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 605™ is a trademark of Śirigen Group Ltd.

<u>Learn more about Brilliant Violet™</u>.

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Excitation Laser Violet Laser (405 nm)

Application References

1. Fridlender ZG, et al. 1999. Hum. Immunol. 11:1028.

(PubMed link indicates BioLegend citation)

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

Product Citations

1. Perry JSA, et al. 2018. Immunity. 48:923. PubMed

2. Cao Y, et al. 2021. Cell Res. 31:732. PubMed

3. Le J, et al. 2020. Immunity. 52(6):1105-1118.e9. PubMed

4. Janssen JJE, et al. 2022. Am J Physiol Endocrinol Metab. 322:E141. PubMed

RRID AB_2716230 (BioLegend Cat. No. 367125) AB_2716231 (BioLegend Cat. No. 367126)

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

Stocks SC, et al. 1990. Biochem. J. 268:275.
 Wright SD, et al. 1990. Science 4975:1431.

Gene ID 929

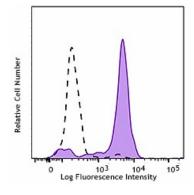
Related Protocols

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/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™ 605 anti-human CD14 (clone 63D3, closed histogram) or Brilliant Violet™ 605 mouse IgG1, κ isotype control (open histogram).

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