

PE/Cyanine7 anti-human CD14 Antibody

Catalog# / Size	325617 / 25 tests 325618 / 100 tests
Clone	HCD14
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 gramnegative pathogens and in the upregulation of adhesion molecules and cytokines expression in monocytes and neutrophils.

Product Details

Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).
Preparation	The antibody was purified by affinity chromatography, and conjugated with PE/Cyanine7 under optimal conditions.
Concentration	Lot-specific (please contact technical support for concentration and total µg amount, or use our Lookup tool if you have a lot number.)
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 μ l per million cells in 100 μ l staining volume or 5 μ l per 100 μ l of whole blood.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 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.
Additional Product Notes	BioLegend is in the process of converting the name PE/Cy7 to PE/Cyanine7. The dye molecule remains the same, so you should expect the same quality and performance from our PE/Cyanine7 products. Please contact Technical Service if you have any questions.
Application References (PubMed link indicates BioLegend citation)	 McMichael A, et al. 1987. Leucocyte Typing III. Oxford University Press. New York. Knapp W, et al. Eds. 1989. Leucocyte Typing IV. Oxford University Press. New York. Schlossman S, et al. Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.
Product Citations	 Headland S, et al. 2014. Sci Rep. 4:5237. PubMed Cheah M, et al. 2015. Proc Natl Acad Sci U S A. 112:4725. PubMed Teirlinck A, et al. 2015. Infect Immun. 83: 3732-3739. PubMed Ball M, et al. 2016. PLoS One. 11: 0149600. PubMed Fletcher H, et al. 2016. Nat Commun. 7: 11290. PubMed Demers K, et al. 2016. PLoS Pathog. 12: 1005805. PubMed Geng S, et al. 2016. Nat Commun. 7:13436. PubMed Wei C, et al. 2016. Cell Death Dis. 7:e2489. PubMed Audigé A, et al. 2017. BMC Immunology. 10.1186/s12865-017-0209-9. PubMed Rydbirk R, et al. 2019. Sci Rep. 9:7781. PubMed Miggitsch C, et al. 2019. EBioMedicine. 46:387. PubMed

AB_830690 (BioLegend Cat. No. 325617) AB_830691 (BioLegend Cat. No. 325618)

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	Monocytes, Macrophages, Granulocytes, Neutrophils
Biology Area	Cell Biology, Immunology, Innate Immunity, Neuroinflammation, Neuroscience
Molecular Family	CD Molecules
Antigen References	1. Stocks S, et al. 1990. Biochem. J. 268:275. 2. Wright S, et al. 1990. Science 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, 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

Product Data



Human peripheral blood monocytes stained with HCD14 PE/Cyanine7

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

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