

## PE/Dazzle™ 594 anti-human CD163 Antibody

<b>Catalog# / Size</b>	333623 / 25 tests 333624 / 100 tests
<b>Clone</b>	GHI/61
<b>Regulatory Status</b>	RUO
<b>Workshop</b>	VI M38
<b>Other Names</b>	GHI/61, M130, RM3/1, p155, Hemoglobin/Haptoglobin Complex Receptor, macrophage-associated antigen, ED2(rat)
<b>Isotype</b>	Mouse IgG1, κ
<b>Description</b>	CD163 is a member of the group B scavenger receptor cysteine-rich superfamily, also known as GHI/61, M130, RM3/1, p155, hemoglobin-haptoglobin complex receptor, or macrophage-associated antigen. It is a 134 kD (non-reduced)/155 kD (reduced) glycoprotein primarily expressed on macrophages, Kupffer cells, monocytes, a subset of dendritic cells, and a subset of hematopoietic stem/progenitor cells. CD163 binds to haptoglobin-hemoglobin complex and TWEAK, and plays a role in clearing hemoglobin and regulating cytokine production by macrophages. Membrane CD163 can be cleaved by metalloproteinases (MMP), resulting in a soluble form. Elevated serum level of sCD163 has been implicated in many kinds of inflammatory diseases.

### Product Details

<b>Verified Reactivity</b>	Human, Cynomolgus, Rhesus
<b>Reported Reactivity</b>	African Green
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<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 PE/Dazzle™ 594 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>	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.  * PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.
<b>Excitation Laser</b>	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
<b>Application Notes</b>	Clone GHI/61 binds to domain 7 of CD163. Additional reported applications (for the relevant formats) include: immunocytochemical staining, immunoprecipitation, western blot <sup>1</sup> , and spatial biology (IBEX) <sup>6,7</sup> .
<b>Application References</b>	1. Pulford K, <i>et al.</i> 1992. <i>Immunology</i> 75:588. (ICC, IP, WB) 2. Law SK, <i>et al.</i> 1993. <i>Eur. J. Immunol.</i> 23:2320. 3. Madsen M, <i>et al.</i> 2004. <i>J. Biol. Chem.</i> 279:51561. 4. Kim WK, <i>et al.</i> 2006. <i>Am. J. Pathol.</i> 168:822. (FC) 5. Buttari B, <i>et al.</i> 2011. <i>Atherosclerosis.</i> 215:316. <a href="#">PubMed</a>
<b>(PubMed link indicates BioLegend citation)</b>	

6. Radtke AJ, *et al.* 2020. *Proc Natl Acad Sci USA*. 117:33455-33465. (SB) [PubMed](#)
7. Radtke AJ, *et al.* 2022. *Nat Protoc.* 17:378-401. (SB) [PubMed](#)

### Product Citations

1. Billing F, *et al.* 2021. *ACS Appl Mater Interfaces*. 13:55534. [PubMed](#)
2. Braun DA, *et al.* 2021. *Cancer Cell*. 39:632. [PubMed](#)
3. Roy S, *et al.* 2018. *Cancer Res*. 78:5600. [PubMed](#)
4. Ireland RE, *et al.* 2022. *Viruses*. 14:. [PubMed](#)
5. Gerrick KY, *et al.* 2018. *PLoS One*. 13:e0208602. [PubMed](#)

### RRID

AB\_2564200 (BioLegend Cat. No. 333623)  
AB\_2564201 (BioLegend Cat. No. 333624)

## Antigen Details

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<b>Structure</b>	134 kD (non-reduced)/155 kD (reduced) glycoprotein, scavenger receptor superfamily
<b>Distribution</b>	Monocytes, macrophages, Kuffer cells, subset of dendritic cells, subset of hematopoietic stem/progenitor cells
<b>Function</b>	Clearance of haptoglobin-hemoglobin complex, regulation of cytokine production by macrophages
<b>Ligand/Receptor</b>	Haptoglobin-hemoglobin complex, TWEAK
<b>Cell Type</b>	Dendritic cells, Hematopoietic stem and progenitors, Macrophages, Monocytes
<b>Biology Area</b>	Cell Biology, Immunology, Innate Immunity, Neuroscience, Neuroscience Cell Markers
<b>Molecular Family</b>	CD Molecules
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Roth J, <i>et al.</i> 1994 <i>Transplantation</i>. 57:127</li><li>2. Van den Heuvel MM, <i>et al.</i> 1999 <i>J. Leukoc. Biol.</i> 66:858</li><li>3. Sulahian TH, <i>et al.</i> 2000 <i>Cytokines</i> 12:1312</li><li>4. Fabrick BO, <i>et al.</i> 2007 <i>J. Neuroimmunol.</i> 187:179</li></ol>
<b>Gene ID</b>	<a href="#">9332</a>

## Related Protocols

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[Cell Surface Flow Cytometry Staining Protocol](#)

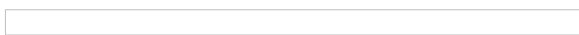
## Other Formats

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PerCP anti-human CD163, Purified anti-human CD163, Biotin anti-human CD163, PE anti-human CD163, PerCP/Cyanine5.5 anti-human CD163, APC anti-human CD163, Brilliant Violet 421™ anti-human CD163, PE/Cyanine7 anti-human CD163, Brilliant Violet 605™ anti-human CD163, FITC anti-human CD163, Alexa Fluor® 647 anti-human CD163, APC/Cyanine7 anti-human CD163, PE/Dazzle™ 594 anti-human CD163, Brilliant Violet 510™ anti-human CD163, Brilliant Violet 711™ anti-human CD163, Brilliant Violet 785™ anti-human CD163, APC/Fire™ 750 anti-human CD163, TotalSeq™-A0358 anti-human CD163, TotalSeq™-C0358 anti-human CD163, TotalSeq™-B0358 anti-human CD163, PE/Cyanine5 anti-human CD163, TotalSeq™-D0358 anti-human CD163

## Product Data

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Human peripheral blood monocytes were stained with CD163 (clone GHI/63) PE/Dazzle™ 594 (filled histogram) or mouse IgG1, κ PE/Dazzle™ 594 isotype control (open histogram).

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