

Purified anti-human CD163 Antibody

Catalog# / Size	333602 / 100 µg
Clone	GHI/61
Regulatory Status	RUO
Workshop	VI M38
Other Names	GHI/61, M130, RM3/1, p155, Hemoglobin/Haptoglobin Complex Receptor, macrophage-associated antigen, ED2(rat)
Isotype	Mouse IgG1, κ
Description	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

Verified Reactivity	Human, Cynomolgus, Rhesus
Reported Reactivity	African Green
Antibody Type	Monoclonal
Host Species	Mouse
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	FC - Quality tested ICC, IP, WB - Reported in the literature, not verified in house
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 ≤2.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	Clone GHI/61 binds to domain 7 of CD163. Additional reported applications (for the relevant formats) include: immunocytochemical staining, immunoprecipitation, western blot ¹ , and spatial biology (IBEX) ^{6,7} .
Application References	<ol style="list-style-type: none"> 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. PubMed 6. Radtke AJ, <i>et al.</i> 2020. <i>Proc Natl Acad Sci USA.</i> 117:33455-33465. (SB) PubMed 7. Radtke AJ, <i>et al.</i> 2022. <i>Nat Protoc.</i> 17:378-401. (SB) PubMed
Product Citations	<ol style="list-style-type: none"> 1. Friebe E, <i>et al.</i> 2020. <i>Cell.</i> 181(7):1626-1642.e20. PubMed 2. Gadalla R, <i>et al.</i> 2022. <i>STAR Protoc.</i> 3:101643. PubMed 3. Wagner J <i>et al.</i> 2019. <i>Cell.</i> 177(5):1330-1345. PubMed

(PubMed link indicates BioLegend citation)

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19. Dutertre CA, *et al.* 2020. *Immunity*. 51(3):573-589.e8.. [PubMed](#)

RRID AB_1088991 (BioLegend Cat. No. 333602)

Antigen Details

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

Related Protocols

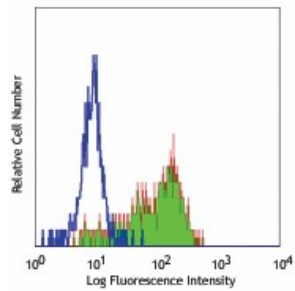
[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

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

Human peripheral blood monocytes
stained with purified GH1/61, followed by
anti-mouse IgG FITC



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