Purified anti-human CD163 Antibody

Catalog# / Size	326502 / 100 µg
Clone	RM3/1
Regulatory Status	RUO
Other Names	GHI/61, M130, RM3/1, p155, Hemoglobin/haptoglobin complex receptor, Macrophage-associated antigen, ED2(rat), Macrophage marker
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, Kuffer cells, monocytes, 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 inflammation diseases.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human monocytes
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 - 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 RM3/1 binds to domain 9 of CD163. Additional reported applications (for the relevant formats) include: immunofluorescence[7].

Application References

(PubMed link indicates BioLegend citation)

1. Högger P, *et al.* 1998. *J. Immunol.* 161:1883. (FC)
2. Zwadlo G, *et al.* 1987. *Exp. Cell Biol.* 55:295. (FC)
3. Buechler C, *et al.* 2000. *J. Leukoc. Biol.* 67:97. (FC)
4. Puig-Kroger A, *et al.* 2009. *Cancer Res.* 69:9395. (FC) PubMed
5. Madsen M, *et al.* 2004. *J. Biol. Chem.* 279:51561. (FC)
6. Jones K, *et al.* 2013. *Clin Cancer Res.* 19:731. (FC) PubMed
7. Stewart DA, *et al.* 2012. *Mol. Cancer Res.* 10:727. (IF)

Product Citations

1. Talbot H, *et al.* 2020. Sci Rep. 10:12572. PubMed
2. Stewart D, *et al.* 2012. Mol Cancer Res. 0.921527778. PubMed
3. Cho H, *et al.* 2007. Physiol Genomics. 29:149. PubMed

RRID AB_893267 (BioLegend Cat. No. 326502)

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, Neuroscience, Neuroscience Cell Markers
Molecular Family	CD Molecules
Antigen References	1. Roth J, *et al.* 1994. *Transolantation.* 57:127. 2. Van den Heuvel MM, *et al.1999. J. Leukoc. Biol. 66:858.* *3. Sulahian TH, et al. 2000. Cytokines 12:1312.* *4. Fabriek BO, et al. 2007. J. Neuroimmunol. 187:179.*
Gene ID	9332

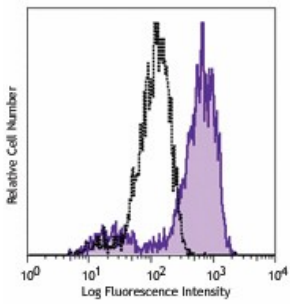
Related Protocols

Cell Surface Flow Cytometry Staining Protocol

Other Formats

Purified anti-human CD163, PE anti-human CD163, Alexa Fluor® 647 anti-human CD163, APC anti-human CD163, PerCP/Cyanine5.5 anti-human CD163, PE/Cyanine7 anti-human CD163

Product Data



IL-10-stimulated (overnight) human peripheral blood monocytes were stained with purified CD163 (clone RM3/1, filled histogram) or purified mouse IgG1, κ isotype control (open histogram), followed by anti-mouse IgG FITC.

BioLegend Inc., 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