

Mouse anti-Human CD163 Antibody | anti-CD163 antibody

Anti-Hu CD163 Biotin

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA129370	Mouse	Human	Immunohistochemistry, Immunoprecipitation, Flow Cytometry, Functional Assay, Western Blot

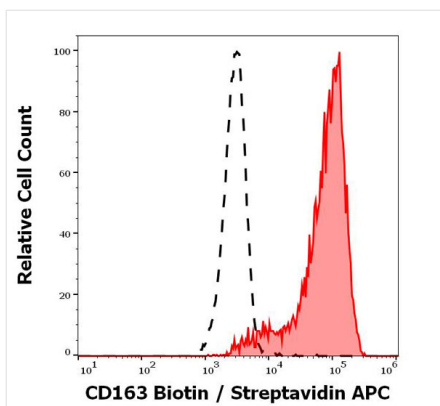
PRODUCT SYNONYMS

CD163; Anti-Hu CD163 Biotin; CD163 molecule; MM130; SCAR11; anti-CD163 antibody

PRODUCT SPECIFICATIONS

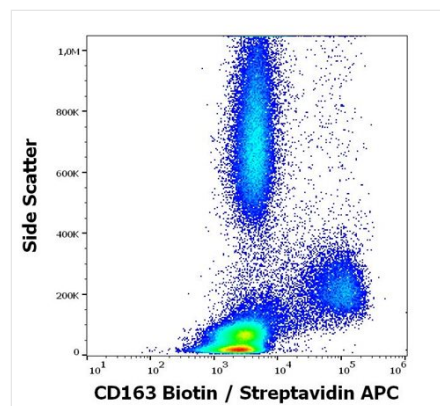
Host	Mouse
Reactivity	Human
Isotype	Mouse IgG1 kappa
Clone Number	GHI/61
Specificity	The mouse monoclonal antibody GHI/61 recognizes an extracellular epitope CD163, an approximately 130 kDa high affinity scavenger receptor expressed mainly on monocytes and macrophages, which binds hemoglobin-haptoglobin complex.
Purity/Purification	Purified antibody is conjugated with biotin LC-NHS ester under optimum conditions and unconjugated antibody and free biotin are removed by size-exclusion chromatography.
Form/Format	Phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-CD163 antibody	IHC (Immunohistochemistry), IP (Immunoprecipitation), FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	Hairy cell leukemia cells
Conjugation	Biotin
Preparation and Storage	Store at 2-8 degree C. Do not freeze.

IMAGES



FCM/FACS (Flow Cytometry)

Separation of human monocytes (red-filled) from lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD163 (GHI/61) Biotin antibody (concentration in sample 5ug/ml, Streptavidin APC).



FCM/FACS (Flow Cytometry)

Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD163 (GHI/61) Biotin antibody (concentration in sample 5ug/ml, Streptavidin APC).

ADDITIONAL INFORMATION

Related Product Information for anti-CD163 antibody	CD163, also known as M130, is a member of the scavenger receptor family, accounting for the clearance of hemoglobin-haptoglobin complexes during limited hemolysis, which protects the body, in particular the kidneys, against heme-mediated oxidative damages. It does not have measurable affinity for noncomplexed hemoglobin or haptoglobin. Immunomodulatory role of CD163 has been postulated. CD163 is expressed by cells of the monocyte-macrophage lineage and its extracellular part also circulates in plasma as a soluble protein, especially during sepsis and other conditions affecting macrophage activity, when its level may raise manifold.
References	*Ohradanova-Repic A, Machacek C, Charvet C, Lager F, Le Roux D, Platzer R, Leksa V, Mitulovic G, Burkard TR, Zlabinger GJ, Fischer MB, Feuillet V, Renault G, Bluml S, Benko M, Suchanek M, Huppa JB, Matsuyama T, Cavaco-Paulo A, Bismuth G, Stockinger H: Extracellular Purine Metabolism Is the Switchboard of Immunosuppressive Macrophages and a Novel Target to Treat Diseases With Macrophage Imbalances. <i>Front Immunol.</i> 2018 Apr 27;9:852., URL: https://www.ncbi.nlm.nih.gov/pubmed/29780382 ,*Pulford K, Micklem K, McCarthy S, Cordell J, Jones M, Mason DY: A monocyte/macrophage antigen recognized by the four antibodies GHI/61, Ber-MAC3, Ki-M8 and SM4. <i>Immunology.</i> 1992 Apr;75(4):588-95., URL: http://www.ncbi.nlm.nih.gov/pubmed/1592433 ,*Kusi KA, Gyan BA, Goka BQ, Dodoo D, Obeng-Adjei G, Troye-Blomberg M, Akanmori BD, Adjimani JP: Levels of soluble CD163 and severity of malaria in children in Ghana. <i>Clin Vaccine Immunol.</i> 2008 Sep;15(9):1456-60., URL: http://www.ncbi.nlm.nih.gov/pubmed/18632918 ,*Bover LC, Cardó-Vila M, Kuniyasu A, Sun J, Rangel R, Takeya M, Aggarwal BB, Arap W, Pasqualini R: A previously unrecognized protein-protein interaction between TWEAK and CD163: potential biological implications. <i>J Immunol.</i> 2007 Jun 15;178(12):8183-94., URL: http://www.ncbi.nlm.nih.gov/pubmed/17548657 ,*Moniuszko M, Kowal K, Rusák M, Pietruczuk M, Dabrowska M, Bodzenta-Lukaszyk A: Monocyte CD163 and CD36 expression in human whole blood and isolated mononuclear cell samples: influence of different anticoagulants. <i>Clin Vaccine Immunol.</i> 2006 Jun;13(6):704-7., URL: https://www.ncbi.nlm.nih.gov/pubmed/16760331 ,*Kim WK, Alvarez X, Fisher J, Bronfin B, Westmoreland S, McLaurin J, Williams K: CD163 identifies perivascular macrophages in normal and viral encephalitic brains and potential precursors to perivascular macrophages in blood. <i>Am J Pathol.</i> 2006 Mar;168(3):822-34., URL: https://www.ncbi.nlm.nih.gov/pubmed/16507898 ,*Philippidis P, Mason JC, Evans BJ, Nadra I, Taylor KM, Haskard DO, Landis RC: Hemoglobin scavenger receptor CD163 mediates interleukin-10 release and heme oxygenase-1 synthesis: antiinflammatory monocyte-macrophage responses in vitro, in resolving skin blisters in vivo, and after cardiopulmonary bypass surgery. <i>Circ Res.</i> 2004 Jan 9;94(1):119-26., URL: https://www.ncbi.nlm.nih.gov/pubmed/14656926 ,*Madsen M, Møller HJ, Nielsen MJ, Jacobsen C, Graversen JH, van den Berg T, Moestrup SK: Molecular characterization of the haptoglobin-hemoglobin receptor CD163. Ligand binding properties of the scavenger receptor cysteine-rich domain region. <i>J Biol Chem.</i> 2004 Dec 3;279(49):51561-7., URL: https://www.ncbi.nlm.nih.gov/pubmed/15448162 ,*Møller HJ, Peterslund NA, Graversen JH, Moestrup SK: Identification of the hemoglobin scavenger receptor/CD163 as a natural soluble protein in plasma. <i>Blood.</i> 2002 Jan 1;99(1):378-80., URL: https://www.ncbi.nlm.nih.gov/pubmed/11756196 ,*Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997)., URL: ,*Law SK, Micklem KJ, Shaw JM, Zhang XP, Dong Y, Willis AC, Mason DY: A new macrophage differentiation antigen which is a member of the scavenger receptor superfamily. <i>Eur J Immunol.</i> 1993 Sep;23(9):2320-5., URL: https://www.ncbi.nlm.nih.gov/pubmed/8370408 ,*Pulford K, Micklem K, McCarthy S, Cordell J, Jones M, Mason DY: A monocyte/macrophage antigen recognized by the four antibodies GHI/61, Ber-MAC3, Ki-M8 and SM4. <i>Immunology.</i> 1992 Apr;75(4):588-95., URL: https://www.ncbi.nlm.nih.gov/pubmed/1592433 ,*Quardokus EM, Saunders DC, McDonough E, Hickey JW, Werlein C, Surette C, Rajbhandari P, Martinez Casals A, Tian H, Lowery L, Neumann EK, Bjorklund F, Neelakantan TV, Croteau J, Wiblin AE, Fisher J, Livengood AJ, Dowell KG, Silverstein JC, Spraggins JM, Pryhuber GS, Deutsch G, Ginty F, Nolan GP, Melov S, Jonigk D, Caldwell MA, Vlachos IS, Mueller W, Gehlenborg N, Stockwell BR, Lundberg E, Snyder MP, Germain RN, Camarillo JM, Kelleher NL, Borner K, Radtke AJ: Organ mapping antibody panels: a community resource for standardized multiplexed tissue imaging. <i>Nat Methods</i> 2023 Aug;20(8):1174-1178. doi: 10.1038/s41592-023-01846-7., URL: https://pubmed.ncbi.nlm.nih.gov/37468619/,

NCBI AND UNIPROT INFORMATION

NCBI GI #	344179110
NCBI GeneID	9332
NCBI Accession #	NP_004235.4
NCBI GenBank Nucleotide #	NM_004244.5
UniProt Accession #	Q86VB7 ; Q07898 ; Q07899 ; Q07900 ; Q07901 ; Q2VLH7 ; C9JIG2
Molecular Weight	125,451 Da

NCBI Official Full Name	scavenger receptor cysteine-rich type 1 protein M130 isoform a
NCBI Official Synonym Full Names	CD163 molecule
NCBI Official Symbol	CD163
NCBI Official Synonym Symbols	M130; MM130
NCBI Protein Information	scavenger receptor cysteine-rich type 1 protein M130; hemoglobin scavenger receptor; macrophage-associated antigen
UniProt Protein Name	Scavenger receptor cysteine-rich type 1 protein M130
UniProt Gene Name	CD163
UniProt Synonym Gene Names	M130; sCD163
UniProt Entry Name	C163A_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/mouse-human-antibody/cd163/129370>