



T7-645-T025

Monoclonal Antibody to CD163 PE-CyTM7 conjugated (25 tests)

Clone:	GHI/61
Isotype:	Mouse IgG1
Specificity:	The mouse monoclonal antibody GHI/61 recognizes CD163, an approximately 130 kDa high affinity scavenger receptor expressed mainly on monocytes and macrophages, which binds hemoglobin-haptoglobin complex. HLDA VI; WS Code M38
Regulatory Status:	RUO
Immunogen:	Hairy cell leukemia cells
Species Reactivity:	Human
Preparation:	The purified antibody is conjugated with tandem dye PE-Cy TM 7 under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Storage Buffer:	The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
Storage / Stability:	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.
Usage:	The reagent is designed for Flow Cytometry analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10 ⁶ cells in a suspension. The content of a vial (0.1 ml) is sufficient for 25 tests.
Expiration:	See vial label
Lot Number:	See vial label
Background:	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.

For laboratory research only, not for drug, diagnostic or other use.

**Antibodies****References:**

- *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. *Immunology*. 1992 Apr;75(4):588-95.
- *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. *Eur J Immunol*. 1993 Sep;23(9):2320-5.
- *Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).
- *Møller HJ, Peterslund NA, Graversen JH, Moestrup SK: Identification of the hemoglobin scavenger receptor/CD163 as a natural soluble protein in plasma. *Blood*. 2002 Jan 1;99(1):378-80.
- *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. *J Biol Chem*. 2004 Dec 3;279(49):51561-7.
- *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. *Circ Res*. 2004 Jan 9;94(1):119-26.
- *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. *Am J Pathol*. 2006 Mar;168(3):822-34.
- *Moniuszko M, Kowal K, Rusak 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. *Clin Vaccine Immunol*. 2006 Jun;13(6):704-7.
- *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. *J Immunol*. 2007 Jun 15;178(12):8183-94.
- *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. *Clin Vaccine Immunol*. 2008 Sep;15(9):1456-60.
- *And many other.

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