anti-human CD163 PE-conjugated

PE-conjugated monoclonal antibody GHI/61 to human CD163

Cat-No: 21271634 500 μl

Clone: GHI/61

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

Isotype subclass: Mouse IgG1

Form: The purified antibody is conjugated with R-Phycoerythrin (R-PE) under optimum conditions. The reagent is adjusted for direct use. No reconstitution is necessary.

Physical state: liquid

Buffer/Additives/Preservative: PBS containing 1% BSA and 0.09% sodium azide (pH 7.2)

Expiration date: The reagent is stable until the expiry date stated on the vial label.

Storage conditions: Store at 4 °C. Avoid prolonged exposure to light.

Application: Flow Cytometry

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 manyfold.

References:

- * 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.
- * 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.
- * 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. 200 Sep;15(9):1456-60.

Warning: Sodium azide is harmful if swallowed (R22). Keep out of reach of children (S2). Keep away from food, drink and animal feeding stuff (S13). Wear suitable protective clothing (S36). If swallowed, seek medical advice immediately and show this container or label (S46). Contact with acids liberates very toxic gas (R32). Azide compounds should be flushed with large volumes of water during disposal to avoid deposits in lead or copper plumbing where explosive conditions can develop.

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