

KIRAVIA Blue 520™ anti-mouse CD163

Catalog # / Size: 1376590 / 100 µg
1376585 / 25 µg

Clone: S15049I

Isotype: Rat IgG2a, κ

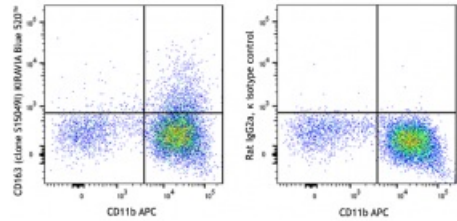
Immunogen: Recombinant mouse CD163 extracellular domain

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with KIRAVIA Blue 520™ under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide

Concentration: 0.2 mg/mL



C57BL/6 mouse bone marrow cells were stained with CD11b APC and anti-mouse CD163 (clone S15049I) KIRAVIA Blue 520™ (left) or rat IgG2a, κ KIRAVIA Blue 520™ isotype control (right). Data shown were from myeloid population.

Applications:

Applications: Flow Cytometry

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 ≤ 0.5 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.

* KIRAVIA Blue 520™ has an excitation maximum of 495 nm, and a maximum emission of 520 nm.

Application Notes: Additional reported applications (for the relevant formats) include: immunoprecipitation¹, *in vitro* costimulation of T and NK cells¹, *in vitro* blocking of allogeneic mixed leukocyte response and inhibition of MHC-unrestricted CTL cytotoxicity^{3,4}, *in vitro* induction of thymocyte differentiation^{2,5-9,11}, and immunohistochemical staining of acetone-fixed frozen sections. For *in vivo* studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) (Cat. No. 102116).

**Application
References:**

1. Gross JA, *et al.* 1992. *J. Immunol.* 149:380. (IP, Costim)
 2. Cibotti R, *et al.* 1997. *Immunity* 6:245. (Costim)
 3. Masten BJ, *et al.* 1997. *Am. J. Respir. Cell Mol. Biol.* 16:335. (Block)
 4. Nishio M, *et al.* 1996. *J. Immunol.* 157:4347. (Block)
 5. Zhang N and He Y-W, 2005. *J. Exp. Med.* 202:395. (Costim)
 6. Terrazas LI, *et al.* 2005. *Intl. J. Parasitology.* 35:1349. (Costim)
 7. Perchonock CE, *et al.* 2006. *Mol Cell Biol.* 26(16):6005. (Costim)
 8. Wang W, *et al.* 2007. *J. Immunol.* 178:4885. (Costim)
 9. Pua HH, *et al.* 2007. *J. Exp. Med.* 204:25. (Costim)
 10. Perchonock CE, *et al.* 2007. *J. Immunol.* 179:1768.
 11. Barbi J, *et al.* 2007. *Blood* 110:2215.
 12. Milpied P, *et al.* 2011. *Blood* 118:2993. [PubMed](#)
 13. Cunningham NR, *et al.* 2011. *Int Immunol.* 23:693. [PubMed](#)
 14. Crispin JC, *et al.* 2012. *J. Immunol.* 188:3567. [PubMed](#)
 15. Li CR, *et al.* 2014. *J Immunol.* 192:1425. [PubMed](#)
 16. Blankenhaus B, *et al.* 2014. *PLoS Pathog.* 10:1003913. [PubMed](#)
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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.

**Antigen
References:**

1. Kim CH, *et al.* 2001. *J. Clin. Invest.* 107:595.
2. Heesch K, *et al.* 2014. *PLoS One.* 9:5.
3. Wehr A, *et al.* 2013. *J. Immunol.* 190:5226.