Anti-CD32 [AT130-5] Standard Size Ab00287-1.1

Isotype and Format: Mouse IgG1, Kappa
Clone Number: AT130-5
Alternative Name(s) of Target: FcγRIIB; FcgRIIb; CD32B; CDw32; FCG2; FCGR2; FCGR2B; IGFR2; Immunoglobulin G Fc receptor II; Low affinity immunoglobulin gamma Fc region receptor II-b; MGC23887; MGC30032; RP11-5K23.6
UniProt Accession Number of Target Protein: P08101
Published Application(s): Blocking, stimulating, WB, FC, IF, IHC
Published Species Reactivity: Mouse
Immunogen: The original antibody was generated by immunizing BALB/c FcγRIIB$^{-/-}$ mice with FcγRIIB-rat CD4 domain 3/4 fusion protein.
Specificity: This antibody is specific for murine CD32, an Fc gamma surface receptor protein with a low affinity for IgG antibodies that expresses on B cells, monocytes/macrophages, NK cells, granulocytes, mast cells, and dendritic cells. CD32 binds antibody-antigen immune complexes and mediates adaptive immune responses.
Application Notes: The original version of this antibody (mouse IgG1) was used in various FACS, Western blot, and immunofluorescence experiments to demonstrate that, for example, interaction with FcγRIIB is critical for the agonistic activity of anti-CD40 mAb (White et al., 2011; PMID: 21742972), and that immunotherapy targeting murine FcγRIIB is limited by mAb consumption and receptor internalization (Williams et al., 2013; PMID: 24026082). It is noted that, unlike the antagonistic anti-CD32 (clone AT128) antibody, which blocks FcγRIIB receptor phosphorylation, this agonistic anti-CD32 (clone AT130-5) has been shown to activate receptor function while blocking immune complex engagement to the inhibitory FcγRs (Vollack et al., 2017; PMID: 28492697). These differential antagonistic/agonistic anti-CD32 mAbs have been used to probe more specifically the role of CD32 in the murine FVIII-specific recall response (Vollack et al., 2017; PMID: 28492697).
Antibody First Published in: Williams et al. Development and characterization of monoclonal antibodies specific for the murine inhibitory FcγRIIB (CD32B). Eur J Immunol. 2012 Aug;42(8):2109-20. doi: 10.1002/eji.201142302. PMID:22760702
Note on publication: The original publication focuses on the development and characterization of monoclonal antibodies specific for murine inhibitory FcγRIIB (CD32B).

Product Form

Size: 200 µg Purified antibody.
Purification: Protein A affinity purified
Supplied In: PBS with 0.02% Proclin 300.
Storage Recommendation: Store at 4ºC for up to 3 months. For longer storage, aliquot and store at -20ºC.
Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.