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CD16 (2H7) Mouse mAb



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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: IHC-Bond, IHC-P	Reactivity: H	Sensitivity: Endogenous	Source/Isotype: Mouse IgG2a	UniProt ID: #P08637	Entrez-Gene Id: 2214
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Product Usage Information	Application IHC Leica Bond Immunohistochemistry (Paraffin)	Dilution 1:200 - 1:800 1:200 - 1:800
Storage	Supplied as liquid tissue culture supernatant containing sodium azide as a preservative. Stable for 6 months when stored at 4°C. <i>Do not aliquot the antibody.</i>	
Specificity / Sensitivity	CD16 (2H7) Mouse mAb recognizes endogenous levels of CD16 protein.	
Source / Purification	Monoclonal antibody is produced by immunizing animals with a prokaryotic recombinant protein corresponding to the external domain of CD16 protein, common to both the transmembrane form and the GPI-linked form.	
Background	CD64 (FcγRI), CD32 (FcγRII), and CD16 (FcγRIII) are three classes of the immunoglobulin superfamily. CD64 has a high affinity for IgG with three Ig-like domains while CD32 and CD16 have low affinities with two Ig-like domains. Two genes encode CD16-A and CD16-B resulting only in a 6 amino acid difference in their ectodomains. However, CD16-A has a transmembrane anchor versus CD16-B, which has a glycosylphosphatidylinositol (1). CD64, CD32, and CD16 are membrane glycoproteins that are expressed by all immunologically active cells and trigger various immune functions (activate B cells, phagocytosis, antibody-dependent cellular cytotoxicity, immune complex clearance, and enhancement of antigen presentation) (2). CD16 cross-linking induces tyrosine phosphorylation (Tyr394) of Lck in NK cells (3). CD32 has tyrosine-based activation motifs in the cytoplasmic domain in contrast to CD16, which associates with molecules possessing these motifs (1).	
Background References	1. Maenaka, K. et al. (2001) <i>J. Biol. Chem.</i> 276, 44898-44904. 2. Fridman, W. H. et al. (1992) <i>Immunol. Rev.</i> 125, 49-76. 3. Pignata, C. et al. (1993) <i>J. Immunol.</i> 151, 6794-6800.	

Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
Applications Key	IHC-Bond: IHC Leica Bond IHC-P: Immunohistochemistry (Paraffin)
Cross-Reactivity Key	H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse GP: Guinea Pig Rab: rabbit All: all species expected
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