

SM1092FT**Monoclonal Antibody to CD32 / FcRII-a - FITC**

Alternate names:	CDw32, FCG2, FCGR2A, FCGR2A1, Fc-gamma RII-a, Fc-gamma-RIIa, IGFR2, IgG Fc receptor II, Low affinity immunoglobulin gamma Fc region receptor II
Quantity:	25 µg
Concentration:	0.1 mg/ml
Background:	Human CD32 antigen is a 40 kD glycoprotein that acts as a low affinity receptor for IgG (also known as Fc gamma RII). The antigen mediates several functions including endocytosis, activation of secretion, cytotoxicity and immunomodulation. CD32 is expressed by B cells, monocytes, granulocytes and platelets.
Uniprot ID:	P12318
NCBI:	NP_001129691.1
GeneID:	2212
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10F (for use in human samples)
Clone:	AT10
Immunogen:	K562 cell line.
Format:	State: Liquid purified IgG fraction. Purification: Affinity Chromatography on Protein A Buffer System: PBS, pH 7.4 containing 0.09% Sodium Azide as preservative and 1% BSA as stabilizer. Label: FITC – Fluorescein Isothiocyanate Isomer 1
Applications:	Flow Cytometry: Use 10 µl of neat-1/10 diluted antibody to label 10e6 cells or 100 µl whole blood. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	The antibody recognizes the Human CD32 antigen. Clone <i>AT10</i> blocks the binding of IgG to Fc gamma R11 (See Ref. 4). The use of SM1092LE is recommended for this purpose. Species: Human, Rhesus monkey, Pig and Dog . Other species not tested.
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	1. Greenman J, Tutt AL, George AJ, Pulford KA, Stevenson GT, Glennie MJ. Characterization of a new monoclonal anti-Fc gamma RII antibody, AT10, and its incorporation into a bispecific F(ab') ₂ derivative for recruitment of cytotoxic effectors. Mol Immunol. 1991 Nov;28(11):1243-54. PubMed PMID: 1835758.

2. Van Den Herik-Oudijk IE, Westerdaal NA, Henriquez NV, Capel PJ, Van De Winkel JG. Functional analysis of human Fc gamma RII (CD32) isoforms expressed in B lymphocytes. *J Immunol.* 1994 Jan 15;152(2):574-85. PubMed PMID: 8283039.
3. Lilliehöök I, Johannisson A, Håkansson L. Expression of adhesion and Fcgamma-receptors on canine blood eosinophils and neutrophils studied by anti-human monoclonal antibodies. *Vet Immunol Immunopathol.* 1998 Feb 27;61(2-4):181-93. PubMed PMID: 9613433.
4. Larsson M, Berge J, Johansson AG, Forsum U. Human dendritic cells handling of binding, uptake and degradation of free and IgG-immune complexed dinitrophenylated human serum albumin in vitro. *Immunology.* 1997 Jan;90(1):138-46. PubMed PMID: 9038724.
5. Dutertre CA, Bonnin-Gélizé E, Pulford K, Bourel D, Fridman WH, Teillaud JL. A novel subset of NK cells expressing high levels of inhibitory FcgammaRIIB modulating antibody-dependent function. *J Leukoc Biol.* 2008 Dec;84(6):1511-20. doi: 10.1189/jlb.0608343. Epub 2008 Aug 21. PubMed PMID: 18719017.
6. Devriendt B, Verdonck F, Summerfield A, Goddeeris BM, Cox E. Targeting of Escherichia coli F4 fimbriae to Fcgamma receptors enhances the maturation of porcine dendritic cells. *Vet Immunol Immunopathol.* 2010 Jun 15;135(3-4):188-98. doi: 10.1016/j.vetimm.2009.11.013. Epub 2009 Dec 3. PubMed PMID: 20022123.
7. Sims GP, Ettinger R, Shirota Y, Yarboro CH, Illei GG, Lipsky PE. Identification and characterization of circulating human transitional B cells. *Blood.* 2005 Jun 1;105(11):4390-8. Epub 2005 Feb 8. PubMed PMID: 15701725.
8. Benitez-Ribas D, Adema GJ, Winkels G, Klasen IS, Punt CJ, Figdor CG, et al. Plasmacytoid dendritic cells of melanoma patients present exogenous proteins to CD4+ T cells after Fc gamma RII-mediated uptake. *J Exp Med.* 2006 Jul 10;203(7):1629-35. Epub 2006 Jun 19. PubMed PMID: 16785312.
9. Zhao, X.W. et al. (2011) CD47-signal regulatory protein-a (SIRPa) interactions form a barrier for antibody-mediated tumor cell destruction. *Proc Natl Acad Sci U S A.* Oct 31. [Epub ahead of print]
10. Araújo MS, de Andrade RA, Sathler-Avelar R, Magalhães CP, Carvalho AT, Andrade MC, et al. Immunological changes in canine peripheral blood leukocytes triggered by immunization with first or second generation vaccines against canine visceral leishmaniasis. *Vet Immunol Immunopathol.* 2011 May 15;141(1-2):64-75. doi: 10.1016/j.vetimm.2011.02.007. Epub 2011 Feb 23. PubMed PMID: 21439654.
11. Santer DM, Hall BE, George TC, Tangsombatvisit S, Liu CL, Arkwright PD, et al. C1q deficiency leads to the defective suppression of IFN-alpha in response to nucleoprotein containing immune complexes. *J Immunol.* 2010 Oct 15;185(8):4738-49. doi: 10.4049/jimmunol.1001731. Epub 2010 Sep 15. PubMed PMID: 20844193.
12. Shannon O, Mörgelin M, Rasmussen M. Platelet activation and biofilm formation by *Aerococcus urinae*, an endocarditis-causing pathogen. *Infect Immun.* 2010 Oct;78(10):4268-75. doi: 10.1128/IAI.00469-10. Epub 2010 Aug 9. PubMed PMID: 20696834.

Pictures:

Staining of human peripheral blood granulocytes with Mouse anti Human CD32-FITC.

