

CD32-A/B/C (H-206): sc-28841

BACKGROUND

CD32 (also designated Fc γ RII) is a low affinity receptor for the Fc fragment of aggregated IgG. CD32 is responsible for the clearance of immunocomplexes by macrophages and also plays an important role in the regulation of antibody production by B cells. IgG can noncooperatively bind either one or two highly glycosylated CD32 molecules, and this binding delivers a negative signal for B cells. CD32 exists as several isoforms that are produced by alternative splicing of three distinct genes, A, B, and C. These isoforms are designated Fc γ RIIA, Fc γ RIIB1, Fc γ RIIB3, and Fc γ RIIC. All isoforms are present on monocytes, placental trophoblasts and endothelial cells. In addition, the Fc γ RIIB forms are present on B lymphocytes, and the Fc γ RIIA and Fc γ RIIC forms are found on neutrophils.

REFERENCES

1. Bijsterbosch, M.K. and Klaus, G.G. 1985. Crosslinking of surface immunoglobulin and Fc receptors on B lymphocytes inhibits stimulation of inositol phospholipid breakdown via the antigen receptors. *J. Exp. Med.* 162: 1825-1836.
2. Huizinga, T.W.J., Kerst, M., Nuyens, J.H., Vlug, A., von dem Borne, A.E., Roos, D. and Tetteroo, P.A. 1989. Binding characteristics of dimeric IgG subclass complexes to human neutrophils. *J. Immunol.* 142: 2365-2369.
3. Stuart, S.G., Simister, N.E., Clarkson, S.B., Kacinski, B.M., Shapiro, M. and Mellman, I. 1989. Human IgG Fc receptor (hFcRII; CD32) exists as multiple isoforms in macrophages, lymphocytes and IgG-transporting placental epithelium. *EMBO J.* 8: 3657-3666.
4. Raveth, J.V. and Kinet, J.P. 1991. Fc receptors. *Annu. Rev. Immunol.* 9: 457-492.
5. Barclay, A.N., Beyers, A.D., Birkeland, M.L., Brown, S.J., Somoza, C. and Williams, A.F. 1993. *The leukocyte antigen facts book.* London: Academic Press, 170-172.
6. Sondermann, P., Jacob, U., Kutscher, C. and Frey, J. 1999. Characterization and crystallization of soluble human Fc γ receptor II (CD32) isoforms produced in insect cells. *Biochemistry* 38: 8469-8477.

CHROMOSOMAL LOCATION

Genetic locus: FCGR2A/FCGR2B/FCGR2C (human) mapping to 1q23.3; Fcgr2b/Fcgr3 (mouse) mapping to 1 H3.

SOURCE

CD32-A/B/C (H-206) is a rabbit polyclonal antibody raised against amino acids 1-206 mapping at the N-terminus of CD32 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

CD32-A/B/C (H-206) is recommended for detection of CD32-A, CD32-B and CD32-C of human origin and, to a lesser extent, Fc γ RIIb and Fc γ RIII of mouse origin and the corresponding rat homolog by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

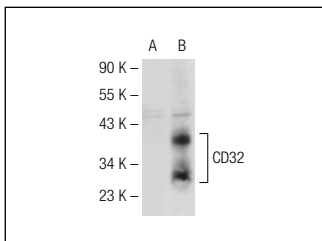
Molecular Weight of CD32-A/C: 40 kDa.

Positive Controls: CD32 (h3): 293T lysate: sc-113838.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CD32-A/B/C (H-206): sc-28841. Western blot analysis of CD32 expression in non-transfected: sc-117752 (A) and human CD32 transfected: sc-113838 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **CD32-A/B/C (B-4): sc-166711** or **CD32-A/B/C (C-7): sc-166578**, our highly recommended monoclonal alternatives to CD32-A/B/C (H-206).