



# CD32-A (ZZ18): sc-73816

## BACKGROUND

CD32 (also designated Fc $\gamma$ 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 $\gamma$ RIIA, Fc $\gamma$ RIIB1, Fc $\gamma$ RIIB3 and Fc $\gamma$ RIIC. All isoforms are present on monocytes, placental trophoblasts and endothelial cells. In addition, the Fc $\gamma$ RIIB forms are present on B lymphocytes, and the Fc $\gamma$ RIIA and Fc $\gamma$ RIIC forms are found on neutrophils.

## REFERENCES

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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.
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## CHROMOSOMAL LOCATION

Genetic locus: FCGR2A (human) mapping to 1q23; Fcgr2a (mouse) mapping to 1 H3.

## SOURCE

CD32-A (ZZ18) is a mouse monoclonal antibody raised against the extracellular domain of CD32-A of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and protein stabilizer.

Blocking peptide available for competition studies, sc-12808 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CD32-A (ZZ18) is recommended for detection of CD32-A of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and flow cytometry (1  $\mu$ g per  $1 \times 10^6$  cells).

Suitable for use as control antibody for CD32-A siRNA (h): sc-29992.

Molecular Weight of CD32-A: 37-43 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203 or U-937 cell lysate: sc-2239.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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.

## STORAGE

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

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.