

CD16-B (Z64): sc-73799

BACKGROUND

CD16, the low affinity Fc γ receptor III (Fc γ RIII) for IgG, exists both as a polypeptide-anchored form known as Fc γ RIIIA or CD16-A in human natural killer cells and macrophages and as a glycosylphosphatidylinositol-anchored form (Fc γ RIIIB or CD16-B) in neutrophils. CD16-A requires association of the γ subunit of Fc epsilon RI or the ζ subunit of the TCR-CD3 complex for cell surface expression. CD16-B is polymorphic; the two alleles are designated NA1 and NA2. CD16 is one of only four eukaryotic receptors known to exist natively in both the transmembrane (TM) isoform (CD16-A) and glycosylphosphatidylinositol (GPI) isoform (CD16-B). Patients with paroxysmal nocturnal hemoglobinuria (PNH) have only about 10% of the normal levels of CD16 on their neutrophils, whereas the expression of FcRII is unaffected. Analysis of FcRIII expression in cells of PNH patients, known to be deficient in PI-linked proteins, suggests FcRIII is not PI-linked in monocytes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FCGR3B (human) mapping to 1q23.3.

RESEARCH USE

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

SOURCE

CD16-B (Z64) is a mouse monoclonal antibody raised against full length recombinant CD16-B of human origin.

PRODUCT

Each vial contains 100 μ g IgG $_{2b}$ in 1.0 ml of PBS with < 0.1% sodium azide and protein stabilizer.

APPLICATIONS

CD16-B (Z64) is recommended for detection of CD16-B of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), flow cytometry (1 μ g per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CD16-B siRNA (h): sc-42760, CD16-B shRNA Plasmid (h): sc-42760-SH and CD16-B shRNA (h) Lentiviral Particles: sc-42760-V.

Molecular Weight of CD16-B: 26 kDa.

Positive Controls: NK-92 whole cell lysate: sc-364788.

STORAGE

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

PROTOCOLS

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



See **CD16 (DJ130c): sc-20052** for CD16 antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647.