SANTA CRUZ BIOTECHNOLOGY, INC.

Fc γ RIII (L-18): sc-19361

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 FcgRIIA (Fc γ RIII), FcgRIIB1 (Fc γ RIIb), FcgRIIB3, and FcgRIIC. 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 RIII and FcgRIIC 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: Fcgr3 (mouse) mapping to 1 H3.

SOURCE

Fc γ RIII (L-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Fc γ RIII of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-19361 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Fc γ RIII (L-18) is recommended for detection of Fc γ RIII of mouse origin and the corresponding rat homolog by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for Fc γ RIIb siRNA (m): sc-42773, Fc γ RIIb shRNA Plasmid (m): sc-42773-SH and Fc γ RIIb shRNA (m) Lentiviral Particles: sc-42773-V.

Molecular Weight of Fc γ RIII: 40 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° 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 or our catalog for detailed protocols and support products.