SANTA CRUZ BIOTECHNOLOGY, INC.

CD35 (N-19): sc-7640

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

CD35, also called complement receptor I (CR1), functions as the receptor for complement components C3b and C4b, and it mediates the phagocytosis by neutrophils and monocytes of particles coated with C3b or C4b. CD35 is expressed on granulocytes, monocytes, B cells, some NK cells and erythrocytes. CD35 is implicated in systemic lupus erythematosus (SLE), a chronic systemic autoimmune disease characterized by the production of a broad spectrum of autoantibodies against nuclear, cytoplasmic and cell surface antigens and an overload of the immune complex. There is an increased proteolytic cleavage of leukocyte cell surface CD35 in SLE patients. Sequence analysis suggests that Crry may be the mouse genetic homolog of the CD35 antigen encoded by the human gene CR1.

REFERENCES

1. Klickstein, L.B., et al. 1987. Human C3b/C4b receptor (CR1). Demonstration of long homologous repeating domains that are composed of the short consensus repeats characteristics of C3/C4 binding proteins. J. Exp. Med. 165: 1095-1112.
2. Klickstein, L.B., et al. 1988. Identification of distinct C3b and C4b recognition sites in the human C3b/C4b receptor (CR1, CD35) by deletion mutagenesis. J. Exp. Med. 168: 1699-1717.
3. Wong, W.W., et al. 1989. Structure of the human CR1 gene. Molecular basis of the structural and quantitative polymorphisms and identification of a new CR1-like allele. J. Exp. Med. 169: 847-863.
4. Ahearn, J.M. and Fearon, D.T. 1989. Structure and function of the complement receptors, CR1 (CD35) and CR2 (CD21). Adv. Immunol. 46: 183-219.
5. Fearon, D.T. and Ahearn, J.M. 1990. Complement receptor type I (C3b/C4b receptor; CD35) and complement receptor type 2 (C3d/Epstein-Barr virus receptor; CD21). Curr. Top. Microbiol. Immunol. 153: 83-98.

CHROMOSOMAL LOCATION

Genetic locus: CR1 (human) mapping to 1q32.2.

SOURCE

CD35 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of CD35 of human 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-7640 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as fluorescein conjugate for immunofluorescence, sc-7640 FITC, 200 µg/1 ml.

STORAGE

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

APPLICATIONS

CD35 (N-19) is recommended for detection of CD35 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Suitable for use as control antibody for CD35 siRNA (h): sc-29994, CD35 shRNA Plasmid (h): sc-29994-SH and CD35 shRNA (h) Lentiviral Particles: sc-29994-V.

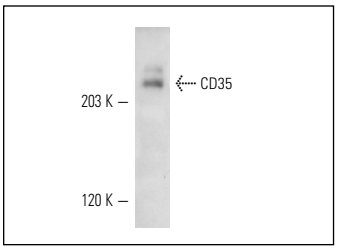
Molecular Weight of CD35: 220 kDa.

Positive Controls: TF-1 cell lysate: sc-2412, human PBL whole cell lysate or HeLa whole cell lysate: sc-2200.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



CD35 (N-19): sc-7640. Western blot analysis of CD35 expression in human PBL whole cell lysate.

RESEARCH USE

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