

CD35 (To5): sc-20055

BACKGROUND

CD35, also called complement receptor 1 (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 Cr1 may be the mouse genetic homolog of the CD35 antigen encoded by the human gene CR1.

CHROMOSOMAL LOCATION

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

SOURCE

CD35 (To5) is a mouse monoclonal antibody raised against C3b receptor enriched precipitates from tonsil cell membranes.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD35 (To5) is available conjugated to agarose (sc-20055 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-20055 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-20055 PE), fluorescein (sc-20055 FITC), Alexa Fluor® 488 (sc-20055 AF488), Alexa Fluor® 546 (sc-20055 AF546), Alexa Fluor® 594 (sc-20055 AF594) or Alexa Fluor® 647 (sc-20055 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-20055 AF680) or Alexa Fluor® 790 (sc-20055 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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RESEARCH USE

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

APPLICATIONS

CD35 (To5) 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

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.

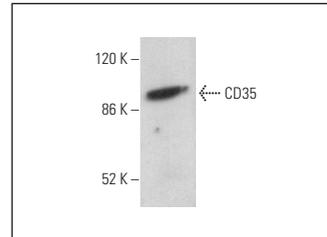
Molecular Weight of CD35: 220 kDa.

Positive Controls: human tonsil tissue extract: sc-364263.

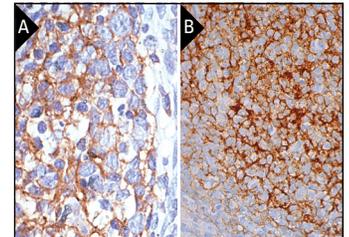
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



CD35 (To5): sc-20055. Western blot analysis of CD35 expression in human tonsil tissue extract.



CD35 (To5): sc-20055. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human tonsil tissue showing membrane staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human tonsil tissue showing membrane staining of cells in germinal center (B).

SELECT PRODUCT CITATIONS

- Kremlitzka, M., et al. 2012. Complement receptor type 1 (CR1, CD35) is a potent inhibitor of B-cell functions in rheumatoid arthritis patients. *Int. Immunol.* 5: 25-33.
- Kremlitzka, M., et al. 2016. Complement receptor type 1 suppresses human B cell functions in SLE patients. *J. Immunol. Res.* 2016: 5758192.

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 for detailed protocols and support products.