

CD35 (E-11): sc-7308

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 (E-11) is a mouse monoclonal antibody raised against intact human monocytes.

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 (E-11) is available conjugated to agarose (sc-7308 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-7308 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-7308 PE), fluorescein (sc-7308 FITC), Alexa Fluor® 488 (sc-7308 AF488), Alexa Fluor® 546 (sc-7308 AF546), Alexa Fluor® 594 (sc-7308 AF594) or Alexa Fluor® 647 (sc-7308 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-7308 AF680) or Alexa Fluor® 790 (sc-7308 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

CD35 (E-11) 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), flow cytometry (1 µg 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 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: HeLa whole cell lysate: sc-2200, HL-60 whole cell lysate: sc-2209 or TF-1 cell lysate: sc-2412.

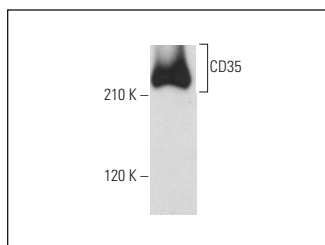
RESEARCH USE

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

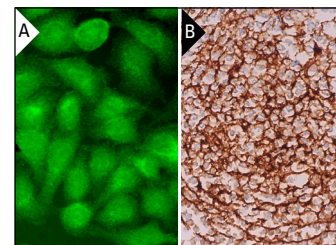
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BPHRP: sc-516102 or m-IgGκ BPHRP (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 BPFITC: sc-516140 or m-IgGκ BPE: 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 BPHRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



CD35 (E-11): sc-7308. Western blot analysis of CD35 expression in HL-60 whole cell lysate.



CD35 (E-11): sc-7308. Immunofluorescence staining of formalin-fixed HeLa cells showing cell surface localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human lymph node tissue showing membrane staining of follicular dendritic cells (B).

SELECT PRODUCT CITATIONS

- Hazan-Eitan, Z., et al. 2006. Induction of Fc γRIIA expression in myeloid PLB cells during differentiation depends on cytosolic phospholipase A₂ activity and is regulated via activation of CREB by PGE₂. *Blood* 108: 1758-1766.
- Kennedy, A.D., et al. 2007. Dectin-1 promotes fungicidal activity of human neutrophils. *Eur. J. Immunol.* 37: 467-478.
- Rout, R., et al. 2011. High CR1 level and related polymorphic variants are associated with cerebral malaria in eastern-India. *Infect. Genet. Evol.* 11: 139-144.
- Li, T., et al. 2020. Genetic deficiency of PHACTR1 promotes atherosclerosis development via facilitating M1 macrophage polarization and foam cell formation. *Clin. Sci.* 134: 2353-2368.
- Day, C.J., et al. 2022. Complement receptor 3 mediates HIV-1 transcytosis across an intact cervical epithelial cell barrier: new insight into HIV transmission in women. *mBio*. E-published.

STORAGE

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

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