

# CD35 (H-300): sc-20924

## 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.

## 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 1 (C3b/C4b receptor; CD35) and complement receptor type 2 (C3d/Epstein-Barr virus receptor; CD21). *Curr. Top. Microbiol. Immunol.* 153: 83-98.
6. Krych, M., et al. 1991. Sites within the complement C3b/C4b receptor important for the specificity of ligand binding. *Proc. Natl. Acad. Sci. USA* 88: 4354-4357.
7. Kalli, K.R., et al. 1991. Mapping of the C3b-binding site of CR1 and construction of a (CR1)<sub>2</sub>-F(ab')<sub>2</sub> chimeric complement inhibitor. *J. Exp. Med.* 174: 1451-1460.

## CHROMOSOMAL LOCATION

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

## SOURCE

CD35 (H-300) is a rabbit polyclonal antibody raised against amino acids 1740-2039 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.

## RESEARCH USE

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

## APPLICATIONS

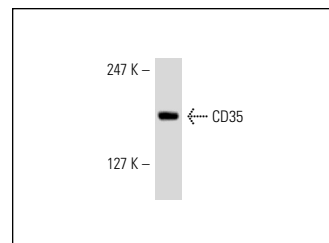
CD35 (H-300) is recommended for detection of CD35 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and 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.

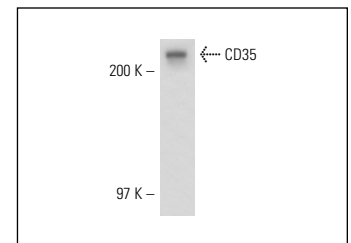
Molecular Weight of CD35: 220 kDa.

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

## DATA



CD35 (H-300): sc-20924. Western blot analysis of CD35 expression in HeLa whole cell lysate.



CD35 (H-300): sc-20924. Western blot analysis of CD35 expression in TF-1 whole cell lysate.

## SELECT PRODUCT CITATIONS

1. Jin, M.K., et al. 2011. Follicular dendritic cells in follicular lymphoma and types of non-Hodgkin lymphoma show reduced expression of CD23, CD35 and CD54 but no association with clinical outcome. *Histopathology* 58: 586-592.
2. Hazrati, L.N., et al. 2012. Genetic association of CR1 with Alzheimer's disease: a tentative disease mechanism. *Neurobiol. Aging* 33: 2949.e5-2949.e12.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **CD35 (E-11): sc-7308** or **CD35 (H-2): sc-166329**, our highly recommended monoclonal alternatives to CD35 (H-300).