

CD55 (h): 293 Lysate: sc-110477

BACKGROUND

CD55, also called decay accelerating factor (DAF), is a GPI-anchored single chain glycoprotein. CD55 may play a role in protecting cells from complement-mediated lysis by preventing the amplification steps of the complement cascade. CD55 functions to prevent the assembly of C3 convertase or to accelerate the disassembly of preformed convertase, which blocks formation of the membrane attack complex. CD55 is expressed on cells in contact with serum, including hematopoietic and many non-hematopoietic cells.

REFERENCES

1. Seya, T., Matsumoto, M., Hara, T., Hatanaka, M., Masoaka, T. and Akedo, H. 1994. Distribution of C3-step regulatory proteins of the complement system, CD35 (CR1), CD46 (MCP), and CD55 (DAF) in hematological malignancies. *Leuk. Lymphoma* 12: 395-400.
2. Nicholson-Weller, A. and Wang, C.E. 1994. Structure and function of decay accelerating factor CD55. *J. Lab. Clin. Med.* 123: 485-491.
3. Bjorge, L., Jensen, T.S. and Matre, R. 1996. Characterization of the complement-regulatory proteins decay-accelerating factor (DAF, CD55) and membrane cofactor protein (MCP, CD46) on a human colonic adenocarcinoma cell line. *Cancer Immunol. Immunother.* 42: 185-192.
4. Spiller, O.B., Moretto, G., Kim, S.U., Morgan, B.P. and Devine, D.V. 1996. Complement expression on astrocytes and astrocytoma cell lines: failure of complement regulation at the C3 level correlates with very low CD55 expression. *J. Neuroimmunol.* 71: 97-106.
5. van Denderen, B.J., Pearse, M.J., Katerelos, M., Nottle, M.B., Du, Z.T., Aminian, A., Adam, W.R., Shenoy-Scaria, A., Lublin, D.M., Shinkel, T.A. and d'Apice, A.J. 1996. Expression of functional decay-accelerating factor (CD55) in transgenic mice protects against human complement-mediated attack. *Transplantation* 61: 582-588.
6. Kuttner-Kondo, L., Medof, M.E., Brodbeck, W. and Shoham, M. 1996. Molecular modeling and mechanism of action of human decay-accelerating factor. *Protein Eng.* 9: 1143-1149.
7. Liszewski, M.K., Farries, T.C., Lublin, D.M., Rooney, I.A. and Atkinson, J.P. 1996. Control of the complement system. *Adv. Immunol.* 61: 201-283.

CHROMOSOMAL LOCATION

Genetic locus: CD55 (human) mapping to 1q32.2.

PRODUCT

CD55 (h): 293 Lysate represents a lysate of human CD55 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

CD55 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive CD55 antibodies. Recommended use: 10-20 µl per lane.

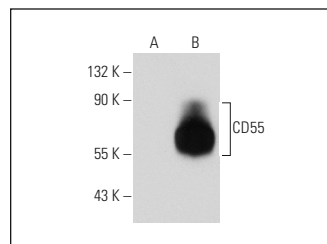
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

CD55 (H-7): sc-133220 is recommended as a positive control antibody for Western Blot analysis of enhanced human CD55 expression in CD55 transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

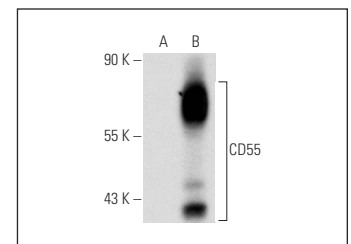
RECOMMENDED SUPPORT REAGENTS

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.

DATA



CD55 (H-7): sc-133220. Western blot analysis of CD55 expression in non-transfected: sc-110760 (A) and human CD55 transfected: sc-110477 (B) 293 whole cell lysates.



CD55 (NaM16-4D3): sc-51733. Western blot analysis of CD55 expression in non-transfected: sc-110760 (A) and human CD55 transfected: sc-110477 (B) 293 whole cell lysates.

RESEARCH USE

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