

CD59 (H-85): sc-28805

BACKGROUND

CD59 is a GPI-anchored glycoprotein that is expressed on leukocytes, vascular endothelial cells, various epithelial cells and placenta. CD59 acts together with CD58 in mediating T cell adhesion and activation, and it may be a second ligand of CD2. CD59 functions as a regulator of the terminal pathway of complement by binding to the C8/C9 components of the assembling membrane attack complex (MAC) on host cell membranes, to stop the formation of the lytic pore. CD59 also drives both calcium release and activation of lipid-raft associated signalling molecules such as tyrosine kinases. CD59 gene has two p53-responsive domains that may be implicated in the defense of host cells from damage by the complement system in inflammation, suggesting that p53 could be used to mediate susceptibility of tumor cells to the complement lysis during chemotherapy.

REFERENCES

1. Landi, A.P., et al. 2003. Determination of CD59 protein in normal human serum by enzyme immunoassay, using octyl-glucoside detergent to release glycosyl-phosphatidylinositol-CD59 from lipid complex. *Immunol. Lett.* 90: 209-213.
2. Lin, F., et al. 2004. Respective roles of decay-accelerating factor and CD59 in circumventing glomerular injury in acute nephrotoxic serum nephritis. *J. Immunol.* 172: 2636-2642.

CHROMOSOMAL LOCATION

Genetic locus: CD59 (human) mapping to 11p13.

SOURCE

CD59 (H-85) is a rabbit polyclonal antibody raised against amino acids 26-110 mapping within an internal region of CD59 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.

APPLICATIONS

CD59 (H-85) is recommended for detection of CD59 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CD59 siRNA (h): sc-37249, CD59 shRNA Plasmid (h): sc-37249-SH and CD59 shRNA (h) Lentiviral Particles: sc-37249-V.

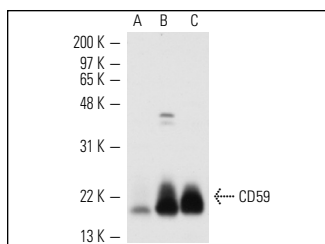
Molecular Weight of CD59: 20 kDa.

Positive Controls: BJAB whole cell lysate: sc-2207, ES-2 cell lysate: sc-24674 or Caki-1 cell lysate: sc-2224.

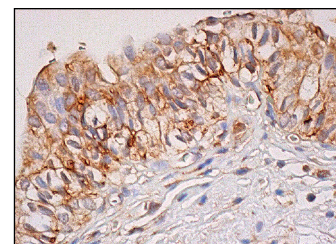
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



CD59 (H-85): sc-28805. Western blot analysis of CD59 expression in BJAB (A), ES-2 (B) and Caki-1 (C) whole cell lysates.



CD59 (H-85): sc-28805. Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing membrane and cytoplasmic staining of urothelial cells.

SELECT PRODUCT CITATIONS

1. Cai, B., et al. 2014. Rapid degradation of the complement regulator, CD59, by a novel inhibitor. *J. Biol. Chem.* 289: 12109-12125.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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



Try **CD59 (H-7): sc-133170** or **CD59 (B-3): sc-133171**, our highly recommended monoclonal alternatives to CD59 (H-85).