# CD59 (S-14): sc-5642



The Power to Question

## **BACKGROUND**

CD59 is a 19 kDa 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 inhibits the cytolytic activity of complement by binding to C8 and C9 and blocking the assembly of the membrane attack complex.

## **REFERENCES**

- 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.
- Storstein, A., et al. 2004. Heterogeneous expression of CD59 on human Purkinje cells. Neurosci. Lett. 362: 21-25.
- 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.
- Yamada, K., et al. 2004. Critical protection from renal ischemia reperfusion injury by CD55 and CD59. J. Immunol. 172: 3869-3875.
- Giddings, K.S., et al. 2004. Human CD59 is a receptor for the cholesteroldependent cytolysin intermedilysin. Nat. Struct. Mol. Biol. 11: 1173-1178.
- 6. Qin, X., et al. 2004. Glycation inactivation of the complement regulatory protein CD59: a possible role in the pathogenesis of the vascular complications of human diabetes. Diabetes 53: 2653-2661.
- Babiker, A.A., et al. 2005. Transfer of functional prostasomal CD59 of metastatic prostatic cancer cell origin protects cells against complement attack. Prostate 62: 105-114.
- 8. Xu, C., et al. 2005. Increased CD59 protein expression predicts a PSA relapse in patients after radical prostatectomy. Prostate 62: 224-232.

## CHROMOSOMAL LOCATION

Genetic locus: Cd59a (mouse) mapping to 2 E2.

#### **SOURCE**

CD59 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CD59 of rat origin.

### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-5642 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **RESEARCH USE**

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

#### **APPLICATIONS**

CD59 (S-14) is recommended for detection of CD59 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 CD59 siRNA (m): sc-35014, CD59 shRNA Plasmid (m): sc-35014-SH and CD59 shRNA (m) Lentiviral Particles: sc-35014-V.

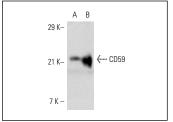
Molecular Weight of CD59: 20 kDa.

Positive Controls: rat brain extract: sc-2392, rat skeletal muscle extract: sc-364810 or mouse placenta extract: sc-364247.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

#### **DATA**



CD59 (S-14): sc-5642. Western blot analysis of CD59 expression in rat skeletal muscle (**A**) and brain (**B**) tissue extracts.

#### **STORAGE**

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



Try **CD59 (H-7):** sc-133170 or **CD59 (1B4):** sc-53626, our highly recommended monoclonal aternatives to CD59 (S-14).