

PSR (m): 293T Lysate: sc-125868

BACKGROUND

Cells undergoing apoptosis lose the asymmetry of plasma membrane phospholipids, and phosphatidylserine is exposed on the outer surface of the membrane. The phosphatidylserine receptor (PSR) specifically recognizes phosphatidylserine and this binding triggers the phagocytosis of apoptotic cells by either macrophages or dendritic cells. PSR is expressed on the surface of macrophages, fibroblasts and epithelial cells, and it has been detected in high levels in heart, skeletal muscle and kidney tissues, and is extensively glycosylated. The mammalian phosphatidylserine receptor displays significant homology to *Caenorhabditis elegans* and *Drosophila melanogaster* proteins, which suggests that PSR has been conserved throughout phylogeny.

REFERENCES

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2. Fadok, V.A., Bratton, D.L., Frasch, S.C., Warner, M.L. and Henson, P.M. 1998. The role of phosphatidylserine in recognition of apoptotic cells by phagocytes. *Cell Death Differ.* 5: 551-562.
3. Liu, Q.A., Hengartner, M.O. 1998. Candidate adaptor protein CED-6 promotes the engulfment of apoptotic cells in *C. elegans*. *Cell* 93: 961-972.
4. Krahling, S., Callahan, M.K., Williamson, P. and Schlegel, R.A. 1999. Exposure of phosphatidylserine is a general feature in the phagocytosis of apoptotic lymphocytes by macrophages. *Cell Death Differ.* 6: 183-189.
5. Franc, N.C., Heitzler, P., Ezekowitz, R.A. and White, K. 1999. Requirement for croquemort in phagocytosis of apoptotic cells in *Drosophila*. *Science* 284: 1991-1994.
6. Fadok, V.A., Bratton, D.L., Rose, D.M., Pearson, A., Ezekowitz, R.A. and Henson, P.M. 2000. A receptor for phosphatidylserine-specific clearance of apoptotic cells. *Nature* 405: 85-90.
7. Green, D.R. and Beere, H.M. 2000. Apoptosis. Gone but not forgotten. *Nature* 405: 28-29.

CHROMOSOMAL LOCATION

Genetic locus: Ptdsr (mouse) mapping to 11 E2.

PRODUCT

PSR (m): 293T Lysate represents a lysate of mouse PSR transfected 293T 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

PSR (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive PSR antibodies. Recommended use: 10-20 µl per lane.

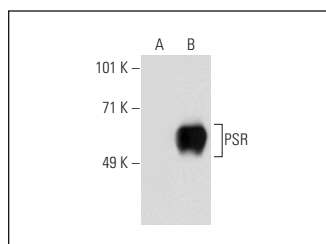
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

PSR (D-4): sc-28349 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse PSR expression in PSR transfected 293T 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



PSR (D-4): sc-28349. Western blot analysis of PSR expression in non-transfected: sc-117752 (A) and mouse PSR transfected: sc-125868 (B) 293T whole cell lysates.

RESEARCH USE

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