

# PSR (APSR-14.4): sc-32740

## 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

- Fadok, V.A., et al. 1992. Exposure of phosphatidyl-serine on the surface of apoptotic lymphocytes triggers specific recognition and removal by macrophages. *J. Immunol.* 148: 2207-2216.
- Fadok, V.A., et al. 1998. The role of phosphatidylserine in recognition of apoptotic cells by phagocytes. *Cell Death Differ.* 5: 551-562.
- Liu, Q.A. and Hengartner, M.O. 1998. Candidate adaptor protein CED-6 promotes the engulfment of apoptotic cells in *C. elegans*. *Cell* 93: 961-972.
- Franc, N.C., et al. 1999. Requirement for croquemort in phagocytosis of apoptotic cells in *Drosophila*. *Science* 284: 1991-1994.
- Krahling, S., et al. 1999. Exposure of phosphatidylserine is a general feature in the phagocytosis of apoptotic lymphocytes by macrophages. *Cell Death Differ.* 6: 183-189.
- Green, D.R., et al. 2000. Apoptosis. Gone but not forgotten. *Nature* 405: 28-29.
- Fadok, V.A., et al. 2000. A receptor for phosphatidylserine-specific clearance of apoptotic cells. *Nature* 405: 85-90.

## CHROMOSOMAL LOCATION

Genetic locus: JMJD6 (human) mapping to 17q25.1; Jmjd6 (mouse) mapping to 11 E2.

## SOURCE

PSR (APSR-14.4) is an Armenian hamster monoclonal antibody raised against His-tagged PSR of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PSR (APSR-14.4) is available conjugated to either phycoerythrin (sc-32740 PE) or fluorescein (sc-32740 FITC), 200 µg/ml, for IF, IHC(P) and FCM.

## STORAGE

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

## APPLICATIONS

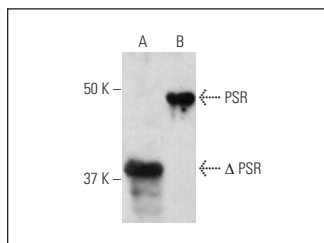
PSR (APSR-14.4) is recommended for detection of PSR of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10<sup>6</sup> cells).

Suitable for use as control antibody for PSR siRNA (h): sc-36324, PSR siRNA (m): sc-36325, PSR shRNA Plasmid (h): sc-36324-SH, PSR shRNA Plasmid (m): sc-36325-SH, PSR shRNA (h) Lentiviral Particles: sc-36324-V and PSR shRNA (m) Lentiviral Particles: sc-36325-V.

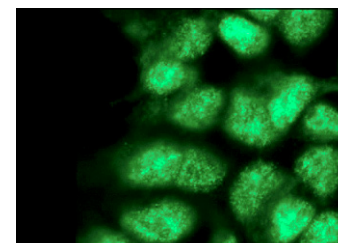
Molecular Weight of PSR: 44 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Caki-1 cell lysate: sc-2224 or NIH/3T3 whole cell lysate: sc-2210.

## DATA



PSR (APSR-14.4): sc-32740. Western blot analysis of PSR truncated (A) and full-length (B) protein. Kindly provided by National Jewish Medical and Research Center.



PSR (APSR-14.4): sc-32740. Immunofluorescence staining of 293 cells showing membrane localization. Kindly provided by National Jewish Medical and Research Center.

## SELECT PRODUCT CITATIONS

- Huang, Y.J., et al. 2022. The JMJD6/HURP axis promotes cell migration via NFκB-dependent centrosome repositioning and Cdc42-mediated Golgi repositioning. *J. Cell. Physiol.* 237: 4517-4530.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.



See **PSR (H-7): sc-28348** for PSR antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.