SANTA CRUZ BIOTECHNOLOGY, INC.

PSR (H-7): sc-28348

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Cells undergoing apoptosis lose the asymmetry of plasma membrane phopholipids, 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.

CHROMOSOMAL LOCATION

Genetic locus: JMJD6 (human) mapping to 17q25.1.

SOURCE

PSR (H-7) is a mouse monoclonal antibody raised against amino acids 1-300 of PSR of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PSR (H-7) is available conjugated to agarose (sc-28348 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-28348 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-28348 PE), fluorescein (sc-28348 FITC), Alexa Fluor® 488 (sc-28348 AF488), Alexa Fluor® 546 (sc-28348 AF546), Alexa Fluor® 594 (sc-28348 AF594) or Alexa Fluor® 647 (sc-28348 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-28348 AF680) or Alexa Fluor® 790 (sc-28348 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

PSR (H-7) is recommended for detection of PSR 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 PSR siRNA (h): sc-36324, PSR shRNA Plasmid (h): sc-36324-SH and PSR shRNA (h) Lentiviral Particles: sc-36324-V.

Molecular Weight of PSR: 44 kDa.

Positive Controls: HT-1080 whole cell lysate: sc-364183, HeLa whole cell lysate: sc-2200 or T-47D cell lysate: sc-2293.

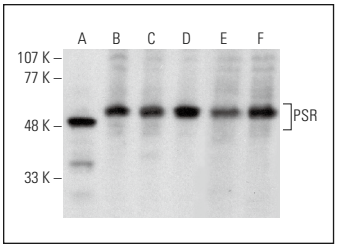
STORAGE

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

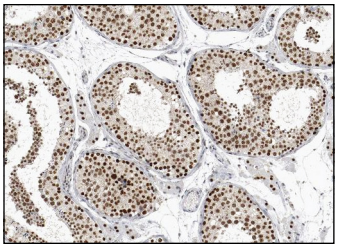
RESEARCH USE

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

DATA



PSR (H-7) HRP: sc-28348 HRP. Direct western blot analysis of PSR expression in HT-1080 (**A**), HeLa (**B**), A549 (**C**), Caki-1 (**D**), T-47D (**E**) and K-562 (**F**) whole cell lysates.



PSR (H-7): sc-28348. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing nuclear staining of cells in ductus seminiferus and Leydig cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

SELECT PRODUCT CITATIONS

1. Boeckel, J.N., et al. 2011. Jumonji domain-containing protein 6 (JMJD6) is required for angiogenic sprouting and regulates splicing of VEGF-receptor 1. Proc. Natl. Acad. Sci. USA 108: 3276-3281.
2. Zamanian, G., et al. 2020. Effect of phosphatidylserine on cirrhosis-induced hepatic encephalopathy: Response to acute endotoxemia in cirrhotic rats. Life Sci. 253: 117606.
3. Biswas, A., et al. 2020. Both EZH2 and JMJD6 regulate cell cycle genes in breast cancer. BMC Cancer 20: 1159.
4. Paschalis, A., et al. 2021. JMJD6 Is a druggable oxygenase that regulates AR-V7 expression in prostate cancer. Cancer Res. 81: 1087-1100.
5. Alahari, S., et al. 2021. JMJD6 dysfunction due to iron deficiency in pre-eclampsia disrupts fibronectin homeostasis resulting in diminished trophoblast migration. Front. Cell Dev. Biol. 9: 652607.
6. Gong, T., et al. 2021. Computational and mass spectrometry-based approach identify deleterious non-synonymous single nucleotide polymorphisms (nsSNPs) in JMJD6. Molecules 26: 4653.
7. Kosai-Fujimoto, Y., et al. 2022. Impact of JMJD6 on intrahepatic cholangiocarcinoma. Mol. Clin. Oncol. 17: 131.
8. D'Amore, C., et al. 2022. KDM2A and KDM3B as potential targets for the rescue of F508del-CFTR. Int. J. Mol. Sci. 23: 9612.
9. Das, P., et al. 2022. JMJD6 orchestrates a transcriptional program in favor of endocrine resistance in ER+ breast cancer cells. Front. Endocrinol. 13: 1028616.
10. Jablonowski, C., et al. 2023. Metabolic reprogramming of cancer cells by JMJD6-mediated pre-mRNA splicing is associated with therapeutic response to splicing inhibitor. bioRxiv 2023.06.26.546606.

PROTOCOLS

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