

PSAP (N-20): sc-26023

BACKGROUND

Puromycin-sensitive aminopeptidase (PSA or PSAP) is a 100 kDa zinc metallopeptidase which degrades neuropeptides by removing amino acid residues from the amino-terminus. The protein is the most abundant aminopeptidase in the brain, however it is not exclusive to that organ. It is localized primarily in the cytoplasm, and plays a role in the metabolism of neuropeptides in nerve terminals and synaptic clefts. The human PSA gene maps to chromosome 17q21.32.

REFERENCES

- Hui, M., et al. 1995. Changes in puromycin-sensitive aminopeptidases in postmortem schizophrenic brain regions. *Neurochem. Int.* 27: 433-441.
- Constam, D.B., et al. 1995. Puromycin-sensitive aminopeptidase. Sequence analysis, expression, and functional characterization. *J. Biol. Chem.* 270: 26931-26939.

CHROMOSOMAL LOCATION

Genetic locus: NPEPPS (human) mapping to 17q21.32; Npepps (mouse) mapping to 11 D.

SOURCE

PSAP (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of puromycin-sensitive aminopeptidase 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.

Blocking peptide available for competition studies, sc-26023 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PSAP (N-20) is recommended for detection of puromycin-sensitive aminopeptidase 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PSAP (N-20) is also recommended for detection of puromycin-sensitive aminopeptidase in additional species, including bovine and porcine.

Suitable for use as control antibody for PSAP siRNA (h): sc-44046, PSAP siRNA (m): sc-152533, PSAP shRNA Plasmid (h): sc-44046-SH, PSAP shRNA Plasmid (m): sc-152533-SH, PSAP shRNA (h) Lentiviral Particles: sc-44046-V and PSAP shRNA (m) Lentiviral Particles: sc-152533-V.

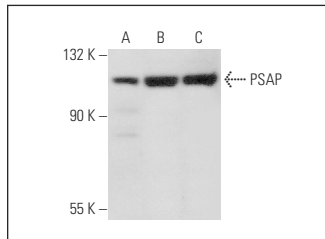
Molecular Weight of PSAP: 103 kDa.

Positive Controls: PSAP (m): 293T Lysate: sc-125862, HeLa whole cell lysate: sc-2200 or MCF7 whole cell lysate: sc-2206.

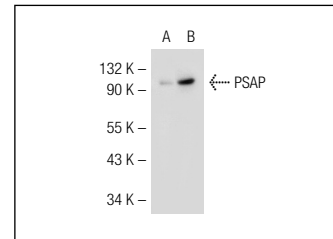
RECOMMENDED SECONDARY REAGENTS

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



PSAP (N-20): sc-26023. Western blot analysis of PSAP expression in rat cerebellum tissue extract (A) and HeLa (B) and MCF7 (C) whole cell lysates.



PSAP (N-20): sc-26023. Western blot analysis of PSAP expression in non-transfected: sc-117752 (A) and mouse PSAP transfected: sc-125862 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Heer, R., et al. 2007. The role of androgen in determining differentiation and regulation of androgen receptor expression in the human prostatic epithelium transient amplifying population. *J. Cell. Physiol.* 212: 572-578.
- Kim, E., et al. 2009. Cytosolic aminopeptidases influence MHC class I-mediated antigen presentation in an allele-dependent manner. *J. Immunol.* 183: 7379-7387.

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 **PSAP (E-5): sc-390184**, our highly recommended monoclonal alternative to PSAP (N-20).