PSAP (C-18): sc-26025



The Power to Question

BACKGROUND

Puromycin-sensitive aminopeptidase (PSA or PSAP) is a 100 kDa zinc metal-lopeptidase 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

- 1. 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.
- Tobler, A.R., et al. 1997. Cloning of the human puromycin-sensitive aminopeptidase and evidence for expression in neurons. J. Neurochem. 68: 889-897.
- 4. Bauer, W.O., et al. 2001. Human puromycin-sensitive aminopeptidase: cloning of 3' UTR, evidence for a polymorphism at amino acid 140 and refined chromosomal localization to 17q21. Cytogenet. Cell Genet. 92: 221-224.
- 5. Yamamoto, M., et al. 2002. Axonal transport of puromycin-sensitive aminopeptidase in rat sciatic nerves. Neurosci. Res. 42: 133-140.
- 6. Kakuta, H., et al. 2003. Fluorescent bioprobes for visualization of puromycin-sensitive aminopeptidase in living cells. Bioorg. Med. Chem. Lett. 13: 83-86.
- Ma, Z., et al. 2003. Proteolytic cleavage of the puromycin-sensitive aminopeptidase generates a substrate binding domain. Arch. Biochem. Biophys. 415: 80-86.
- Thompson, M.W., et al. 2003. Analysis of conserved residues of the human puromycin-sensitive aminopeptidase. Peptides 24: 1359-1365.
- 9. SWISS-PROT/TrEMBL (P55786). World Wide Web URL: http://www.expasy.ch/sprot/sprot-top.html

CHROMOSOMAL LOCATION

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

SOURCE

PSAP (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of puromycin-sensitive aminopeptidase of human origin.

STORAGE

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

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-26025 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PSAP (C-18) is recommended for detection of PSAP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 (C-18) is also recommended for detection of PSAP in additional species, including equine, canine, bovine, porcine and avian.

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: Mouse brain extract: sc-2253.

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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.

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