

PMPCA (D-14): sc-163243

BACKGROUND

PMPCA [peptidase (mitochondrial processing) α], also known as α -MPP, P-55, INPP5E or MPPA, is a 525 amino acid protein that belongs to the peptidase M16 family and exists as a heterodimer of α and β subunits. Localizing to mitochondrial matrix, PMPCA cleaves transit peptides from mitochondrial protein precursors. PMPCA is encoded by a gene that maps to human chromosome 9, which houses over 900 genes and comprises nearly 4% of the human genome. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, and Familial dysautonomia, are both associated with chromosome 9. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

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CHROMOSOMAL LOCATION

Genetic locus: PMPCA (human) mapping to 9q34.3; Pmpca (mouse) mapping to 2 A3.

RESEARCH USE

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

SOURCE

PMPCA (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PMPCA of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-163243 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PMPCA (D-14) is recommended for detection of PMPCA 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).

PMPCA (D-14) is also recommended for detection of PMPCA in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for PMPCA siRNA (h): sc-92579, PMPCA siRNA (m): sc-152350, PMPCA shRNA Plasmid (h): sc-92579-SH, PMPCA shRNA Plasmid (m): sc-152350-SH, PMPCA shRNA (h) Lentiviral Particles: sc-92579-V and PMPCA shRNA (m) Lentiviral Particles: sc-152350-V.

Molecular Weight of PMPCA: 58 kDa.

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) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

STORAGE

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

PROTOCOLS

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

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Try **PMPCA (B-8): sc-390471** or **PMPCA (G-2): sc-390470**, our highly recommended monoclonal alternatives to PMPCA (D-14).