

PAOX (A-21): sc-133881

BACKGROUND

PAOX (polyamine oxidase (exo-N4-amino)), also known as PAO, is a 649 amino acid protein that localizes to both the cytoplasm and to peroxisomes and belongs to the flavin monoamine oxidase family. Expressed in a variety of tissues, PAOX exists as a monomer that uses FAD as a cofactor to catalyze the oxidation of N¹-acetylspermine and N¹-acetylspermidine to spermidine and putrescine, respectively, thereby playing a role in polyamine back-conversion, as well as in the regulation of polyamine intracellular concentration. Multiple isoforms of PAOX exist due to alternative splicing events. The gene encoding PAOX maps to human chromosome 10, which houses over 1,200 genes and comprises nearly 4.5% of the human genome. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie-Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

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CHROMOSOMAL LOCATION

Genetic locus: PAOX (human) mapping to 10q26.3; Paox (mouse) mapping to 7 F4.

SOURCE

PAOX (A-21) is an affinity purified rabbit polyclonal antibody raised against synthetic PAOX peptide of human origin.

PRODUCT

Each vial contains 50 μ g IgG in 500 μ l PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

PAOX (A-21) is recommended for detection of PAOX of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PAOX siRNA (h): sc-90376, PAOX siRNA (m): sc-152006, PAOX shRNA Plasmid (h): sc-90376-SH, PAOX shRNA Plasmid (m): sc-152006-SH, PAOX shRNA (h) Lentiviral Particles: sc-90376-V and PAOX shRNA (m) Lentiviral Particles: sc-152006-V.

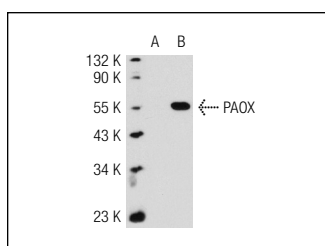
Molecular Weight of PAOX isoforms: 70/56/52/50/35/25/12/8/7/5 kDa.

Positive Controls: PAOX (m): 293T Lysate: sc-127297 or PAOX (h2): 293T Lysate: sc-159701.

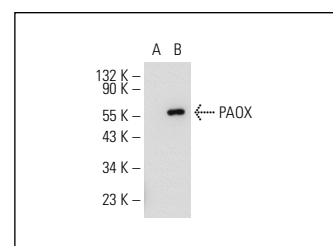
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotting 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).

DATA



PAOX (A-21): sc-133881. Western blot analysis of PAOX expression in non-transfected: sc-117752 (A) and mouse PAOX transfected: sc-127297 (B) 293T whole cell lysates.



PAOX (A-21): sc-133881. Western blot analysis of PAOX expression in non-transfected: sc-117752 (A) and human PAOX transfected: sc-159701 (B) 293T whole cell lysates.

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.