

PAO (m): 293 Lysate: sc-110732

BACKGROUND

Mammalian polyamine catabolism is under the control of two enzymes, spermidine/spermine N1-acetyltransferase and the flavin adenine dinucleotide-dependent polyamine oxidase (PAO). In the polyamine back conversion pathway, spermine and spermidine are acetylated by SSAT1 and then oxidized by PAO to produce spermidine and putrescine, respectively. The PAO protein regulates polyamine intracellular concentration and may act as a determinant of cellular sensitivity to the antitumor polyamine analogs. PAO contributes to β -alanine production via aldehyde dehydrogenase conversion of 3-amino-propanal. The PAO gene encodes more than five transcript variants which encode four active isoenzymes. The longest isoenzyme, PAOh1, represents a new addition to the poly-amine metabolic pathway and may be a target for antineoplastic drug development.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Smox (mouse) mapping to 2 F1.

PRODUCT

PAO (m): 293 Lysate represents a lysate of mouse PAO transfected 293 cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

PAO (m): 293 Lysate is suitable as a Western Blotting positive control for mouse reactive PAO antibodies. Recommended use: 10-20 μ l per lane.

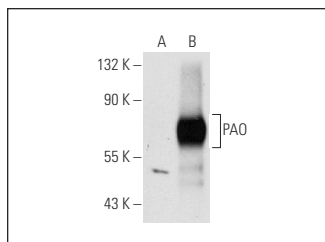
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

PAO (C-3): sc-166185 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse PAO expression in PAO transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



PAO (C-3): sc-166185. Western blot analysis of PAO expression in non-transfected: sc-110760 (A) and mouse PAO transfected: sc-110732 (B) 293 whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.