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PAOX (m): 293T Lysate: sc-127297

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, nonsyndromatic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

REFERENCES

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7. Järvinen, A., Keinänen, T.A., Grigorenko, N.A., Khomutov, A.R., Uimari, A., Vepsäläinen, J., Närvenen, A., Alhonen, L. and Jänne, J. 2006. Guide molecule-driven stereospecific degradation of α-methylpolyamines by polyamine oxidase. *J. Biol. Chem.* 281: 4589-4595.

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.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Paox (mouse) mapping to 7 F4.

PRODUCT

PAOX (m): 293T Lysate represents a lysate of mouse PAOX transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

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

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

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