



PAOX Monoclonal Antibody

Catalog No	YP-mAb-02852
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	PAOX
Immunogen	Synthesized peptide derived from PAOX . at AA range: 260-340
Specificity	PAOX Monoclonal Antibody detects endogenous levels of PAOX protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	EC:1.5.3.13;PAO;Peroxisomal N(1)-acetyl-spermine/spermidine oxidase; UNQ1923/PRO4398;PAOX;Polyamine oxidase
Observed Band	70kD
Calculated Molecular Weight	70kD
Cell Pathway	Peroxisome . Cytoplasm .
Tissue Specificity	Widely expressed. Not detected in spleen. Expressed at lower level in neoplastic tissues.
Function	catalytic activity:N(1),N(12)-diacetylspermine + O(2) + H(2)O = N(1)-acetylspermidine + 3-acetamidobutanal + H(2)O(2).,catalytic activity:N(1)-acetylspermidine + O(2) + H(2)O = putrescine + 3-acetamidopropanal + H(2)O(2) .,catalytic activity:N(1)-acetylspermine + O(2) + H(2)O = spermidine + 3-acetamidopropanal + H(2)O(2).,cofactor:Binds 1 FAD per subunit., function:Flavoenzyme which catalyzes the oxidation of N(1)-acetylspermine to spermidine and is thus involved in the polyamine back-conversion. Can also oxidize N(1)-acetylspermidine to putrescine. Substrate specificity: N(1)-acetylspermine = N(1)-acetylspermidine > N(1),N(12)-diacylspermine >> spermine. Does not oxidize spermidine. Plays an important role in the regulation of polyamine intracellular concentration and has the potential to act as a



determinant of cellular sensitivity to the antitumor polyamine analogs.,
induction:By polyami

Background

catalytic activity: $N(1),N(12)$ -diacetylspermine + $O(2) + H(2)O = N(1)$ -acetylspermidine + 3-acetamidobutanol + $H(2)O(2)$.,catalytic activity: $N(1)$ -acetylspermidine + $O(2) + H(2)O =$ putrescine + 3-acetamidopropanol + $H(2)O(2)$.,catalytic activity: $N(1)$ -acetylspermine + $O(2) + H(2)O =$ spermidine + 3-acetamidopropanol + $H(2)O(2)$.,cofactor: Binds 1 FAD per subunit., function:Flavoenzyme which catalyzes the oxidation of $N(1)$ -acetylspermine to spermidine and is thus involved in the polyamine back-conversion. Can also oxidize $N(1)$ -acetylspermidine to putrescine. Substrate specificity: $N(1)$ -acetylspermine = $N(1)$ -acetylspermidine > $N(1),N(12)$ -diacylspermine >> spermine. Does not oxidize spermidine. Plays an important role in the regulation of polyamine intracellular concentration and has the potential to act as a determinant of cellular sensitivity to the antitumor polyamine analogs., induction:By polyamine analogs.,miscellaneous:Oxidizes $N(1)$ -acetylated polyamines on the exo-side of their $N(4)$ -amino groups. Plant PAO oxidizes spermine on the endo-side of the $N(4)$ -nitrogen.,pathway:Amine and polyamine metabolism; spermine metabolism.,similarity:Belongs to the flavin monoamine oxidase family.,subunit:Monomer.,tissue specificity:Widely expressed. Not detected in spleen. Expressed at lower level in neoplastic tissues.,

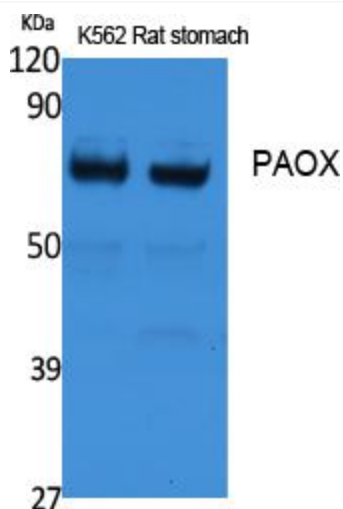
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using PAOX Monoclonal Antibody