



PAOX Polyclonal Antibody

Catalog No	YP-Ab-02852
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;IHC;IF;ELISA
Gene Name	PAOX
Immunogen	Synthesized peptide derived from PAOX . at AA range: 260-340
Specificity	PAOX Polyclonal Antibody detects endogenous levels of PAOX protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/40000.. IF 1:50-200
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: $N(1),N(12)\text{-diacetylspermine} + O(2) + H(2)O = N(1)\text{-acetylspermidine} + 3\text{-acetamidobutanal} + H(2)O(2)$.,catalytic activity: $N(1)\text{-acetylspermidine} + O(2) + H(2)O = \text{putrescine} + 3\text{-acetamidopropanal} + H(2)O(2)$.,catalytic activity: $N(1)\text{-acetylspermine} + O(2) + H(2)O = \text{spermidine} + 3\text{-acetamidopropanal} + H(2)O(2)$.,cofactor: Binds 1 FAD per subunit.,
function: Flavoenzyme which catalyzes the oxidation of $N(1)\text{-acetylspermine}$ to spermidine and is thus involved in the polyamine back-conversion. Can also oxidize $N(1)\text{-acetylspermidine}$ to putrescine. Substrate specificity: $N(1)\text{-acetylspermine} = N(1)\text{-acetylspermidine} > N(1),N(12)\text{-diacylspermine} >> \text{spermine}$. 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 $N(1)\text{-acetylated}$ polyamines on the exo-side of their $N(4)\text{-amino}$ groups. Plant PAO oxidizes spermine on the endo-side of the $N(4)\text{-nitrogen}$.,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

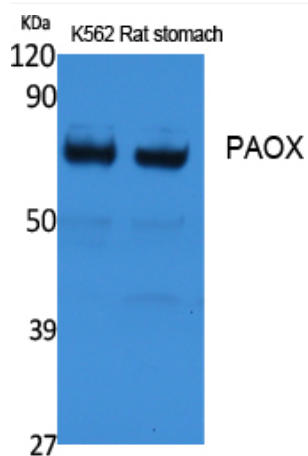
Avoid repeated freezing and thawing!

Usage suggestions

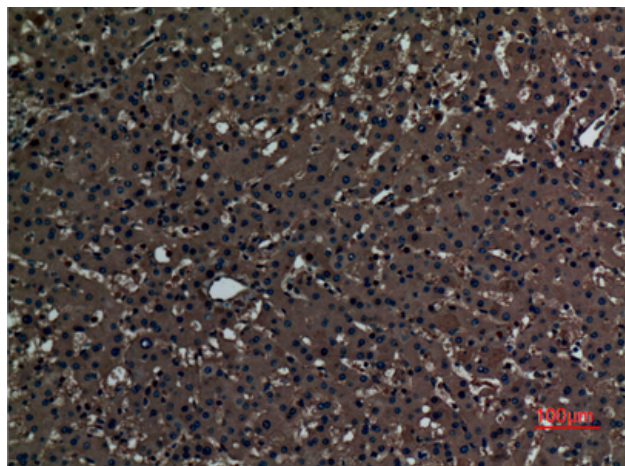
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



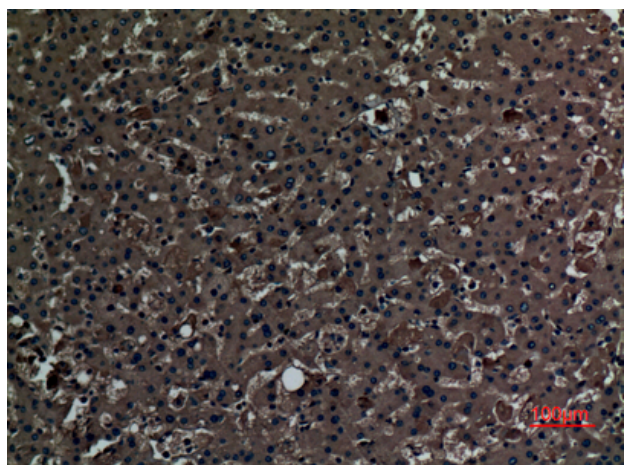
Products Images



Western Blot analysis of extracts from rat stomach, K562 cells, using PAOX Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human-liver, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded human-liver, antibody was diluted at 1:100