



# PAOX Polyclonal Antibody

<b>Catalog No</b>	BYab-02852
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	PAOX
<b>Protein Name</b>	Peroxisomal N(1)-acetyl-spermine/spermidine oxidase
<b>Immunogen</b>	Synthesized peptide derived from PAOX . at AA range: 260-340
<b>Specificity</b>	PAOX Polyclonal Antibody detects endogenous levels of PAOX protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/40000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	PAOX; PAO; Peroxisomal N(1)-acetyl-spermine/spermidine oxidase; Polyamine oxidase
<b>Observed Band</b>	70kD
<b>Cell Pathway</b>	Peroxisome . Cytoplasm .
<b>Tissue Specificity</b>	Widely expressed. Not detected in spleen. Expressed at lower level in neoplastic tissues.
<b>Function</b>	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

**Nanjing BYabs science technology Co.,Ltd**



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-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 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!

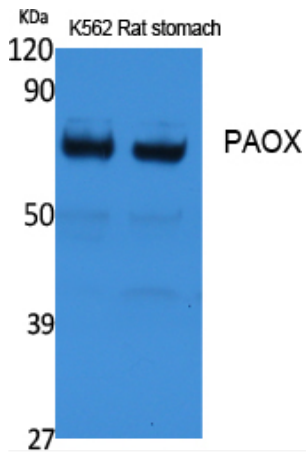
#### Usage suggestions

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

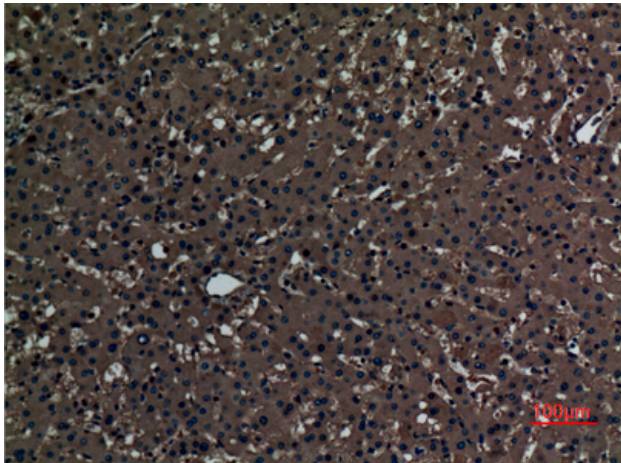
Nanjing BYabscience technology Co.,Ltd



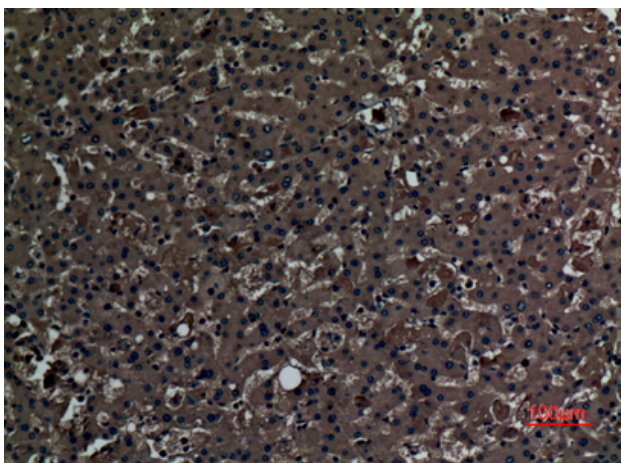
## Products Images



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