

Rabbit MIOX Polyclonal Antibody | anti-MIOX antibody

Anti-MIOX Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127413	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

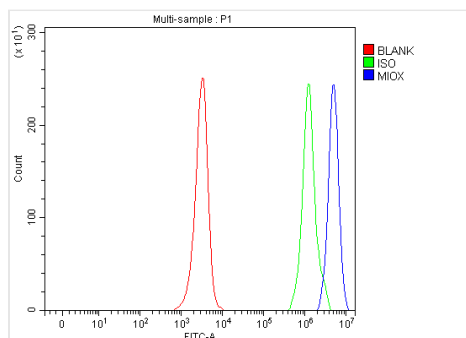
PRODUCT SYNONYMS

MIOX; Polyclonal Antibody; Anti-MIOX Antibody Picoband; anti-MIOX antibody

PRODUCT SPECIFICATIONS

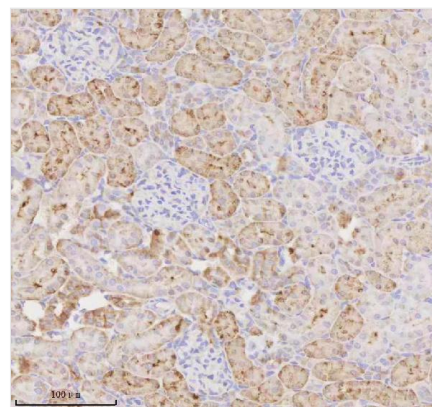
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-MIOX antibody	ELISA, FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E coli-derived human MIOX recombinant protein (Position: M1-K266). Human MIOX shares 89.8% and 90.5% amino acid (aa) sequence identity with mouse and rat MIOX, respectively.
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.

IMAGES



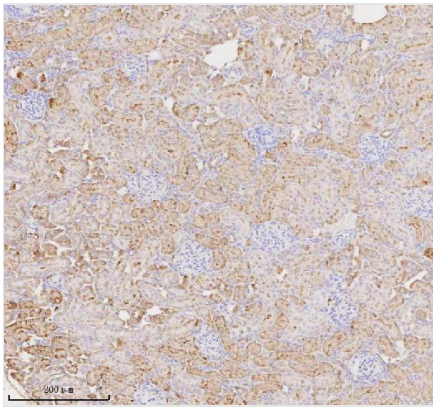
FCM/FACS (Flow Cytometry)

Figure 5. Flow Cytometry analysis of JK cells using anti-MIOX antibody (AAA127413). Overlay histogram showing JK cells stained with AAA127413 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-MIOX Antibody (AAA127413, 1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



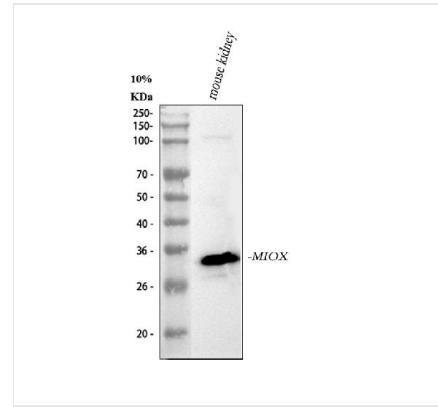
IHC (Immunohistochemistry)

Figure 4. IHC analysis of MIOX using anti-MIOX antibody (AAA127413). MIOX was detected in a paraffin-embedded section of rat kidney tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-MIOX Antibody (AAA127413) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



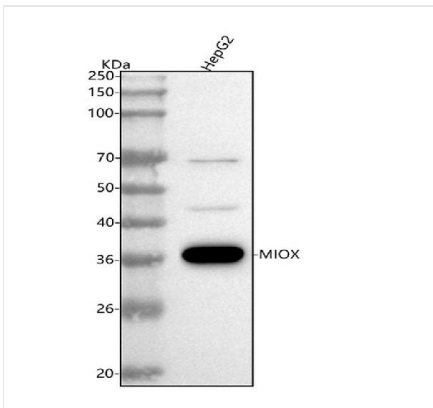
IHC (Immunohistochemistry)

Figure 3. IHC analysis of MIOX using anti-MIOX antibody (AAA127413). MIOX was detected in a paraffin-embedded section of rat kidney tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-MIOX Antibody (AAA127413) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



WB (Western Blot)

Figure 2. Western blot analysis of MIOX using anti-MIOX antibody (AAA127413). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: mouse kidney tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-MIOX antigen affinity purified polyclonal antibody (#AAA127413) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for MIOX at approximately 36 kDa. The expected band size for MIOX is at 33 kDa.



WB (Western Blot)

Figure 1. Western blot analysis of MIOX using anti-MIOX antibody (AAA127413). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human HepG2 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-MIOX antigen affinity purified polyclonal antibody (#AAA127413) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for MIOX at approximately 36 kDa. The expected band size for MIOX is at 33 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-MIOX antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-MIOX antibody	Primary Antibodies

References	1. Arner, R. J., Prabhu, K. S., Thompson, J. T., Hildenbrandt, G. R., Liken, A. D., Reddy, C. C. Myo-inositol oxygenase: molecular cloning and expression of a unique enzyme that oxidizes myo-inositol and D-chiro-inositol. Biochem. J. 360: 313-320, 2001. 2. Gross, M. B. Personal Communication. Baltimore, Md. 3/31/2016.3. Yang, Q., Dixit, J. B., Wada, J., Tian, Y., Wallner, E. I., Srivastva, S. K., Kanwar, Y. S. Identification of a renal specific oxido-reductase in newborn diabetic mice. Proc. Nat. Acad. Sci. 97: 9896-9901, 2000.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	33667030
NCBI GeneID	55586
NCBI Accession #	NP_060054.4
NCBI GenBank Nucleotide #	NM_017584.5
UniProt Accession #	Q9UGB7; Q05DJ6; Q5S8C9; Q9BZZ1; Q9UHB8
Molecular Weight	24,516 Da
NCBI Official Full Name	inositol oxygenase
NCBI Official Synonym Full Names	myo-inositol oxygenase
NCBI Official Symbol	MIOX
NCBI Official Synonym Symbols	ALDRL6
NCBI Protein Information	inositol oxygenase
UniProt Protein Name	Inositol oxygenase
UniProt Gene Name	MIOX
UniProt Synonym Gene Names	ALDRL6; KSP32; RSOR; MI oxygenase
UniProt Entry Name	MIOX_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/miox-antibody-flow-cytometry-immunohistochemistry-western-blot-elisa/127413>