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# Anti-MAOA Picoband Antibody

Catalog # ABO12350

## Product Information

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| **Application** | WB, IHC-P |
| **Primary Accession** | P21397 |
| **Host** | Rabbit |
| **Reactivity** | Human, Mouse, Rat |
| **Clonality** | Polyclonal |
| **Format** | Lyophilized |
| **Description** | Rabbit IgG polyclonal antibody for Amine oxidase [flavin-containing] A(MAOA) detection. Tested with WB, IHC-P in Human;Mouse;Rat. |
| **Reconstitution** | Add 0.2ml of distilled water will yield a concentration of 500ug/ml. |

## Additional Information

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| **Gene ID** | 4128 |
| **Other Names** | Amine oxidase [flavin-containing] A, 1.4.3.4, Monoamine oxidase type A, MAO-A, MAOA |
| **Calculated MW** | 59682 |
| **Application Details** | Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Mouse, Rat, By Heat<br><br>Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat |
| **Subcellular Localization** | Mitochondrion outer membrane; Single-pass type IV membrane protein; Cytoplasmic side. |
| **Tissue Specificity** | Heart, liver, duodenum, blood vessels and kidney. |
| **Source** | Eukaryota |
| **Protein Name** | Amine oxidase [flavin-containing] A |
| **Contents** | Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3. |
| **Immunogen** | A synthetic peptide corresponding to a sequence at the C-terminus of human MAOA (457-493aa REVLNGLGKVTEKDIWVQEPESKDVPAVEITHTFWER), different from the related mouse sequence by five amino acids, and from the related rat sequence by six amino acids. |
| **Purification** | Immunogen affinity purified. |

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| **Cross Reactivity** | No cross reactivity with other proteins |
| **Storage** | At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing. |

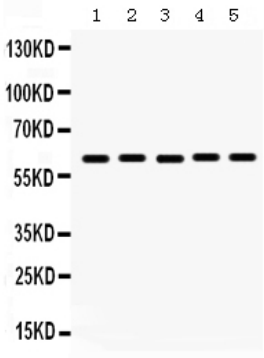
## Protein Information

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| **Name** | MAOA ( HGNC:6833) |
| **Function** | Catalyzes the oxidative deamination of primary and some secondary amine such as neurotransmitters, with concomitant reduction of oxygen to hydrogen peroxide and has important functions in the metabolism of neuroactive and vasoactive amines in the central nervous system and peripheral tissues (PubMed:18391214, PubMed:20493079, PubMed:24169519, PubMed:8316221). Preferentially oxidizes serotonin (PubMed:20493079, PubMed:24169519). Also catalyzes the oxidative deamination of kynuramine to 3-(2-aminophenyl)-3-oxopropanal that can spontaneously condense to 4-hydroxyquinoline (By similarity). |
| **Cellular Location** | Mitochondrion outer membrane {ECO:0000250\|UniProtKB:P21396}; Single-pass type IV membrane protein {ECO:0000250\|UniProtKB:P21396}; Cytoplasmic side {ECO:0000250\|UniProtKB:P21396} |
| **Tissue Location** | Heart, liver, duodenum, blood vessels and kidney. |

## Background

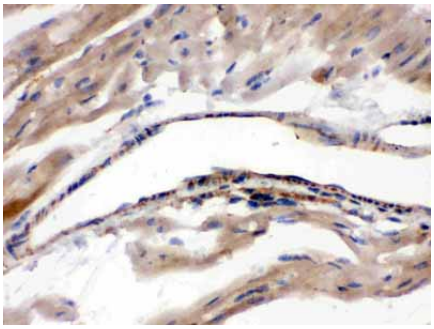
MAOA(Monoamine oxidase A), also known as AMINE OXIDASE (FLAVIN-CONTAINING) A, is an enzyme that in humans is encoded by the MAO-A gene. MAOA is an isozyme of monoamine oxidase which is also mapped on Xp11.3. MAOA degrades amine neurotransmitters, such as dopamine, norepinephrine, and serotonin. The protein localizes to the outer mitochondrial membrane. Mutation in MAOA results in monoamine oxidase deficiency, or Brunner syndrome. In humans, there is a 30-base repeat sequence repeated in one of several different numbers of times in the promoter region of the gene coding for MAOA. MAO-A levels in the brain as measured using positron emission tomography are elevated by an average of 34% in patients with major depressive disorder. Inhibition of MAOA prevented apoptosis, and serum starvation of cortical brain cells from Maoa-deficient mice resulted in reduced apoptosis compared with wildtype mice.

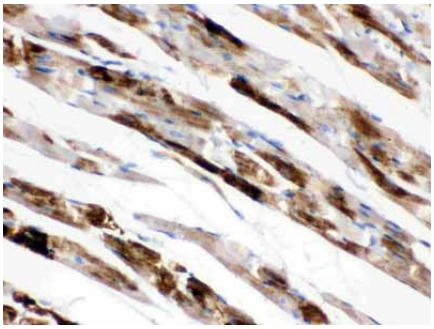
## Images



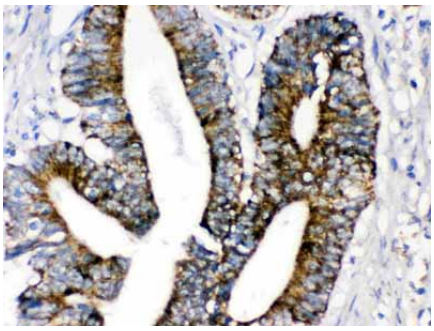

Anti- MAOA Picoband antibody, ABO12350, Western blottingAll lanes: Anti MAOA (ABO12350) at 0.5ug/mlLane 1: Rat Kidney Tissue Lysate at 50ugLane 2: Mouse Kidney Tissue Lysate at 50ugLane 3: COLO320 Whole Cell Lysate at 40ugLane 4: HEPG2 Whole Cell Lysate at 40ugLane 5: HEPA Whole Cell Lysate at 40ugPredicted bind size: 60KDObserved bind size: 60KD

Anti- MAOA Picoband antibody, ABO12350,IHC(P)IHC(P): Mouse Cardiac Muscle Tissue





Anti- MAOA Picoband antibody, ABO12350,IHC(P)IHC(P): Rat Cardiac Muscle Tissue



Anti- MAOA Picoband antibody, ABO12350,IHC(P)IHC(P): Human Intestinal Cancer Tissue

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.