10320 Camino Santa Fe, Suite G
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Anti-MAOA Picoband Antibody
Catalog # ABO12350

Specification

Anti-MAOA Picoband Antibody - Product Information

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.

Anti-MAOA Picoband Antibody - Additional Information

Gene ID 4128

Other Names
Amine oxidase [flavin-containing] A, 1.4.3.4, Monoamine oxidase type A, MAO-A, MAOA

Calculated MW
59682 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat

Western blot, 0.1-0.5 µg/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.

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.

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.**

Anti-MAOA Picoband Antibody - Protein Information

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.

Anti-MAOA Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-MAOA Picoband Antibody - Images

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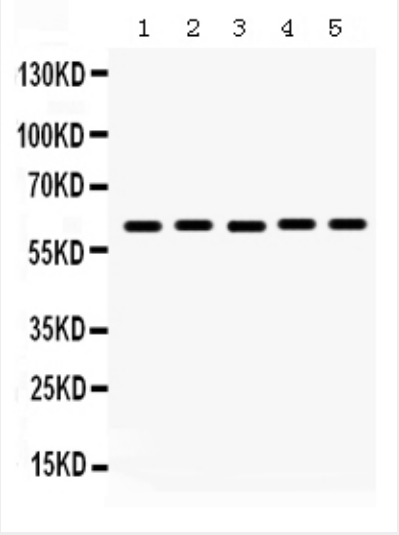
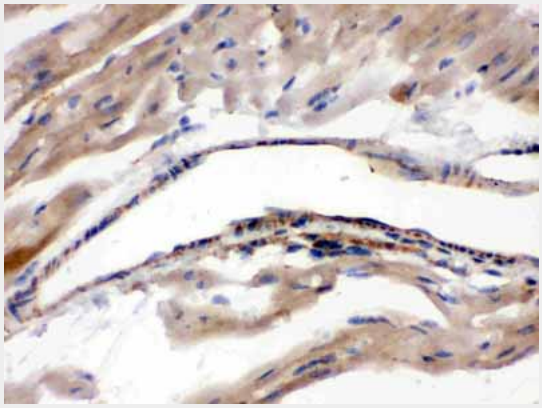
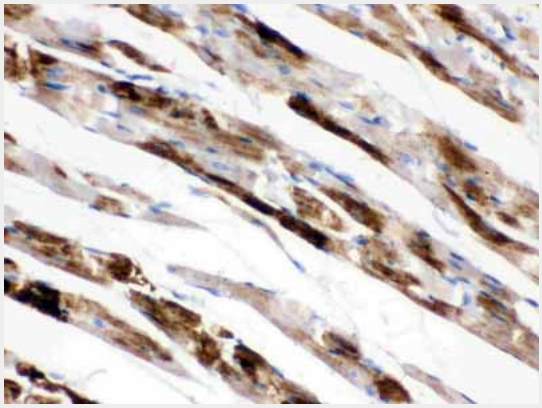


Anti- MAOA Picoband antibody, ABO12350, Western blottingAll lanes: Anti MAOA (ABO12350) at 0.5ug/mlLane 1: Rat Kidney Tissue Lysate at 50ugLane 2: Mouse Kidney Tissue Lysate at 50ugLane 3: COLO320 Whole Cell Lysate at 40ugLane 4: HEPG2 Whole Cell Lysate at 40ugLane 5: HEPA Whole Cell Lysate at 40ugPredicted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

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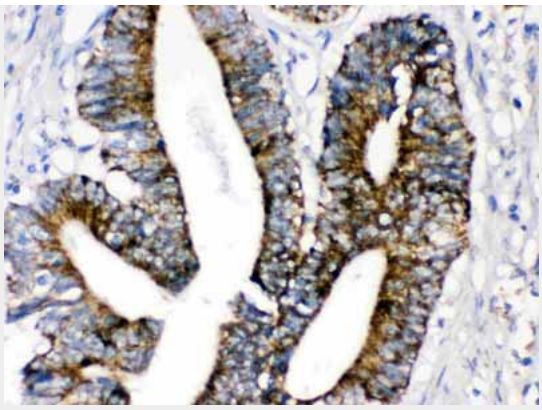

Anti- MAOA Picoband antibody, ABO12350,IHC(P)IHC(P): Human Intestinal Cancer Tissue

Anti-MAOA Picoband Antibody - 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.