

Anti-MAOA Picoband Antibody

Catalog # ABO12350

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.

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
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 μ 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 Na ₂ HPO ₄ , 0.05mg Na ₃ N.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human MAOA (457-493aa REVLNGLGKVTEKDIWVQEPESKDVPVEITHTFWER), 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 reconstitution, 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

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

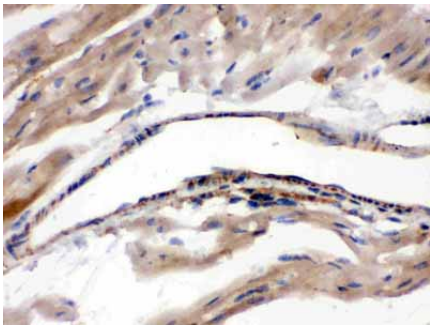
MAOA(Monoamine oxidase A), also known as AMINE OXIDASE (FLAVIN-CONTAINING) A, is an enzyme that in humans is encoded by the MAO-A gene. MAOA is an isozyme of monoamine oxidase which is also mapped on Xp11.3. MAOA degrades amine neurotransmitters, such as dopamine, norepinephrine, and serotonin. The protein 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 Maa-deficient mice resulted in reduced apoptosis compared with wildtype mice.

Images

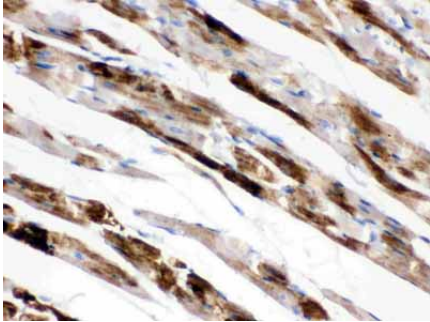


Anti- MAOA Picoband antibody, ABO12350, Western blotting
 All lanes: Anti MAOA (ABO12350) at 0.5ug/ml
 Lane 1: Rat Kidney Tissue Lysate at 50ug
 Lane 2: Mouse Kidney Tissue Lysate at 50ug
 Lane 3: COLO320 Whole Cell Lysate at 40ug
 Lane 4: HEPG2 Whole Cell Lysate at 40ug
 Lane 5: HEPA Whole Cell Lysate at 40ug
 Predicted bind size: 60KD
 Observed bind size: 60KD

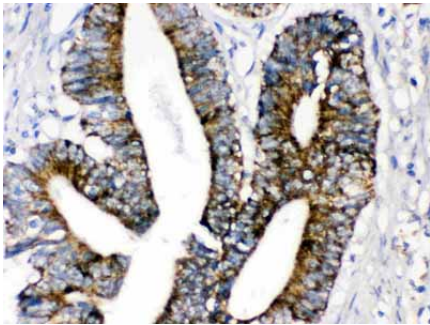
Anti- MAOA Picoband antibody, ABO12350, IHC(P)
 Mouse Cardiac Muscle Tissue



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'.