

Anti-MAOA Antibody

Catalog # ABO10963

Product Information

Application	WB, IHC-P
Primary Accession	P21397
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Amine oxidase[flavin-containing] A(MAOA) detection. Tested with WB, IHC-P in Human.
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 µg/ml, Human, By Heat Western blot, 0.1-0.5 µg/ml, Human
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 Thimerosal, 0.05mg Na ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human MAOA (51-69aa RTYTIRNEHVDYVDVGGAY).
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.
Sequence Similarities	Belongs to the flavin monoamine oxidase family.

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

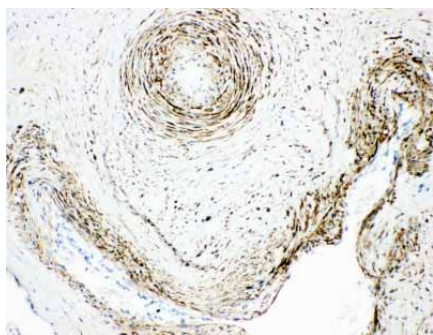
MAOA(Monoamine oxidase A), also known as AMINE OXIDASE(FLAVIN-CONTAINING) A, is an enzyme that in humans is encoded by the MAO-A gene. MAOA is an isozyme of monoamine oxidase which is also mapped on Xp11.3. MAOA degrades amine neurotransmitters, such as dopamine, norepinephrine, and serotonin. The protein 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 antibody, ABO10963, Western blotting
 lanes: Anti MAOA (ABO10963) at 0.5ug/ml
 WB: Human Placenta Tissue Lysate at 50ug
 Predicted bind size: 60KD
 Observed bind size: 60KD

Anti-MAOA antibody, ABO10963, IHC(P)
 IHC(P): Human Placenta Tissue



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