

**Anti-MAOA Antibody**  
**Catalog # ABO10963****Specification**

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**Anti-MAOA Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">P21397</a>
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.

**Anti-MAOA 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, By Heat<br><br>Western blot, 0.1-0.5 µg/ml, Human<br>

**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 Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**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 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.**

**Sequence Similarities**

Belongs to the flavin monoamine oxidase family.

**Anti-MAOA 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:<a href="http://www.uniprot.org/citations/18391214" target="\_blank">18391214</a>, PubMed:<a href="http://www.uniprot.org/citations/20493079" target="\_blank">20493079</a>, PubMed:<a href="http://www.uniprot.org/citations/24169519" target="\_blank">24169519</a>, PubMed:<a href="http://www.uniprot.org/citations/8316221" target="\_blank">8316221</a>). Preferentially oxidizes serotonin (PubMed:<a href="http://www.uniprot.org/citations/20493079" target="\_blank">20493079</a>, PubMed:<a href="http://www.uniprot.org/citations/24169519" target="\_blank">24169519</a>). 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 Antibody - Protocols**

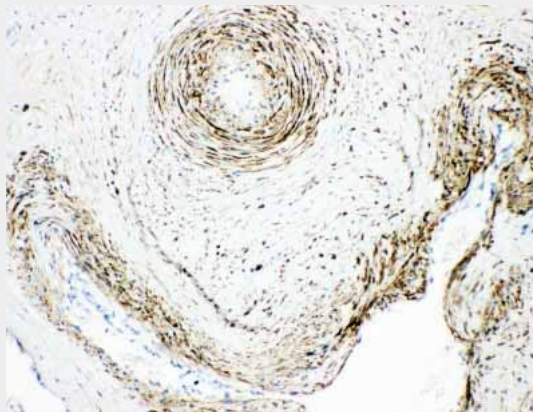
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-MAOA Antibody - Images**



Anti-MAOA antibody, ABO10963, Western blotting All 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

### Anti-MAOA 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 Maa-deficient mice resulted in reduced apoptosis compared with wildtype mice.