

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

Anti-MAOA Antibody - Product Information

Application	WB, IHC
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.

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

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.

Protein Name

Amine oxidase[flavin-containing] A

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

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:[18391214](http://www.uniprot.org/citations/18391214), PubMed:[20493079](http://www.uniprot.org/citations/20493079), PubMed:[24169519](http://www.uniprot.org/citations/24169519), PubMed:[8316221](http://www.uniprot.org/citations/8316221)). Preferentially oxidizes serotonin (PubMed:[20493079](http://www.uniprot.org/citations/20493079), PubMed:[24169519](http://www.uniprot.org/citations/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

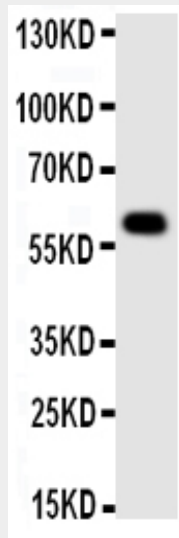
Heart, liver, duodenum, blood vessels and kidney.

Anti-MAOA Antibody - Protocols

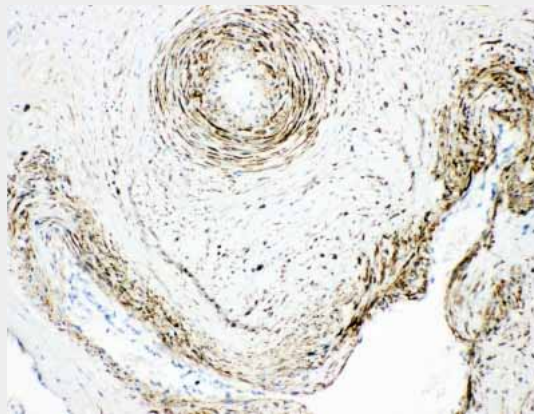
Provided below are standard protocols that you may find useful for product applications.

- [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 Maa0-deficient mice resulted in reduced apoptosis compared with wildtype mice.