

**Goat Anti-Monoamine Oxidase A Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF1677a**Specification**

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**Goat Anti-Monoamine Oxidase A Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P21397</a>
Other Accession	<a href="#">NP_000231</a> , <a href="#">4128</a>
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	59682

**Goat Anti-Monoamine Oxidase A Antibody - Additional Information**

**Gene ID** 4128

**Other Names**

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

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-Monoamine Oxidase A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-Monoamine Oxidase A 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) target="\_blank">18391214</a>, PubMed: [20493079](http://www.uniprot.org/citations/20493079) target="\_blank">20493079</a>, PubMed: [24169519](http://www.uniprot.org/citations/24169519) target="\_blank">24169519</a>, PubMed: [8316221](http://www.uniprot.org/citations/8316221) target="\_blank">8316221</a>)

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

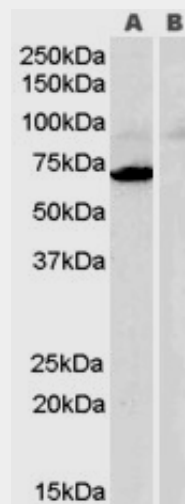
Heart, liver, duodenum, blood vessels and kidney.

### Goat Anti-Monoamine Oxidase A Antibody - Protocols

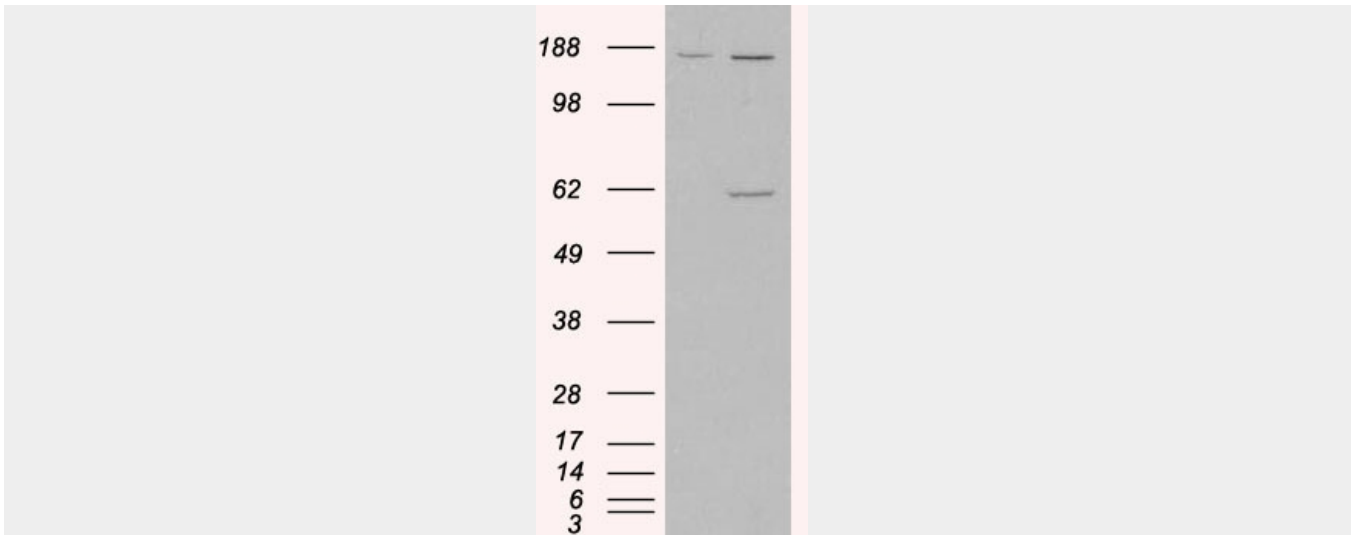
Provided below are standard protocols that you may find useful for product applications.

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

### Goat Anti-Monoamine Oxidase A Antibody - Images



AF1677a (0.3 µg/ml) staining of human heart lysate (35 µg protein in RIPA buffer) with (B) and without (A) blocking with the immunising peptide. Primary incubation was 1 hour. Detected by chemiluminescence.



HEK293 overexpressing MAOA (RC207276) and probed with AF1677a (mock transfection in first lane), tested by Origene.

### **Goat Anti-Monoamine Oxidase A Antibody - Background**

This gene encodes monoamine oxidase A, an enzyme that degrades amine neurotransmitters, such as dopamine, norepinephrine, and serotonin. The protein localizes to the mitochondrial outer membrane. The gene is adjacent to a related gene on the opposite strand of chromosome X. Mutation in this gene results in monoamine oxidase deficiency, or Brunner syndrome.

### **Goat Anti-Monoamine Oxidase A Antibody - References**

Maltreatment, MAOA, and Delinquency: Sex Differences in Gene-Environment Interaction in a Large Population-Based Cohort of Adolescents. Aslund C, et al. Behav Genet, 2010 Aug 24. PMID 20734127.

MAOA genotype, family relations and sexual abuse in relation to adolescent alcohol consumption. Nilsson KW, et al. Addict Biol, 2010 Aug 23. PMID 20731636.

Gene-environment interaction of child temperament. Ivorra JL, et al. J Dev Behav Pediatr, 2010 Sep. PMID 20729761.

A cis-Phase Interaction Study of Genetic Variants Within the MAOA Gene in Major Depressive Disorder. Zhang J, et al. Biol Psychiatry, 2010 Aug 4. PMID 20691428.

[Functional polymorphism of genes inactivating catecholamines and emotional deficits in paranoid schizophrenia] Tylec A, et al. Psychiatr Pol, 2010 Mar-Apr. PMID 20677440.