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

Specification

Goat Anti-Monoamine Oxidase A Antibody - Product Information

Application	**WB, E**
Primary Accession	P21397
Other Accession	NP_000231, 4128
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

Dilution
WB~~1:1000
E~~N/A

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, 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}

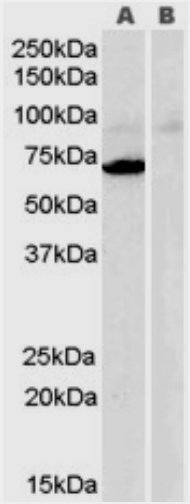
Tissue Location
Heart, liver, duodenum, blood vessels and kidney.

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 Cytomety
- 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.

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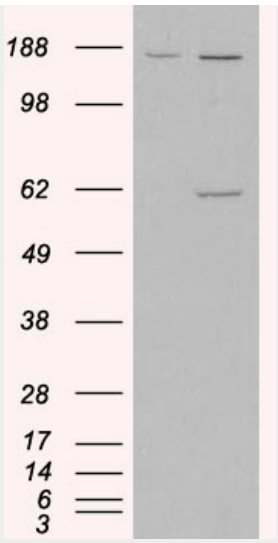

HEK293 overexpressing MAOA (RC207276) and probed with AF1677a (mock transfection in first lane), tested by Origene.

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.