

Monoamine Oxidase B Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54448

Specification

Monoamine Oxidase B Polyclonal Antibody - Product Information

Application WB, IHC-P, IHC-F, IF, ICC, E

Primary Accession <u>P27338</u>

Reactivity
Host
Clonality
Calculated MW
Physical State

Rat, Pig, Dog, Bovine
Rabbit
Polyclonal
S9 KDa
Liquid

Immunogen KLH conjugated synthetic peptide derived

from human MAOB/Monoamine Oxidase B

Epitope Specificity 51-150/520 Isotype IaG

Isotype Purity

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

SUBCELLULAR LOCATION Proclin300 and 50% Glycerol.

Mitochondrion outer membrane.

SIMILARITY Belongs to the flavin monoamine oxidase

family.

SUBUNIT Monomer, homo- or heterodimer

(containing two subunits of similar size). Each subunit contains a covalently bound flavin. Enzymatically active as monomer

(By similarity).

Important Note

This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.

Background Descriptions

affinity purified by Protein A

Monoamine oxidase (MAO) is an enzyme of the mitochondrial outer membrane and catalyzes the oxidative deamination of biogenic amines throughout the body (1). MAO is critical in the neuronal metabolism of catecholamine and indolamine transmitters (2). Cultured skin fibroblasts show both MAO-A and MAO-B and both MAOs differ in molecular structure (1). MAO-A, the primary type in fibroblasts, preferentially degrades serotonin and norepinephrine (3). Only MAO-B is present in platelets and only MAO-A is present in trophoblasts (1). MAO-B, the primary type found not only in platelets but also in the brain of man and other primates, preferentially degrades phenylethylamine and benzylamine (3). MAO has been of particular interest to psychiatry and genetics because of the suggestion that low activity is a 'genetic marker' for schizophrenia (4). The genes which encode MAO-A and MAO-B map to human chromosome Xp11.23 (5).

Monoamine Oxidase B Polyclonal Antibody - Additional Information

Gene ID 4129



Other Names

Amine oxidase [flavin-containing] B, 1.4.3.4, Monoamine oxidase type B, MAO-B, MAOB

Dilution

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<span class ="dilution_WB">WB~~1:1000</span><br \><span class
="dilution_IHC-P">IHC-P~~N/A</span><br \><span class
="dilution_IHC-F">IHC-F~~N/A</span><br \><span class
="dilution_IF">IF~~1:50~200</span><br \><span class ="dilution_ICC">ICC~~N/A</span><br \><span class ="dilution_ICC">ICC~~N/A</span><br \><span class ="dilution_ICC">ICC~~N/A</span><br \><span class ="dilution_ICC">ICC~~N/A</span>
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Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 $^{\circ}$ C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 $^{\circ}$ C.

Monoamine Oxidase B Polyclonal Antibody - Protein Information

Name MAOB (HGNC:6834)

Function

Catalyzes the oxidative deamination of primary and some secondary amines such as neurotransmitters, and exogenous amines including the tertiary amine, neurotoxin 1-methyl-4-phenyl-1,2,3,6- tetrahydropyridine (MPTP), with concomitant reduction of oxygen to hydrogen peroxide and participates in the metabolism of neuroactive and vasoactive amines in the central nervous system and peripheral tissues (PubMed:11049757, PubMed:11134050, PubMed:20493079, PubMed:8316221, PubMed:8665924). Preferentially degrades benzylamine and phenylethylamine (PubMed:11049757, PubMed:11134050, PubMed:20493079, PubMed:8316221, PubMed:8665924).

Cellular Location

Mitochondrion outer membrane; Single-pass type IV membrane protein; Cytoplasmic side

Monoamine Oxidase B Polyclonal Antibody - Protocols

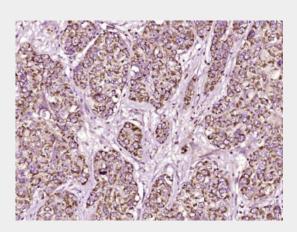
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety

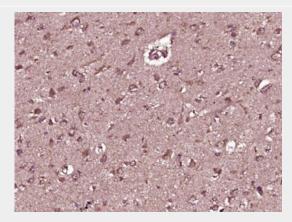


• Cell Culture

Monoamine Oxidase B Polyclonal Antibody - Images

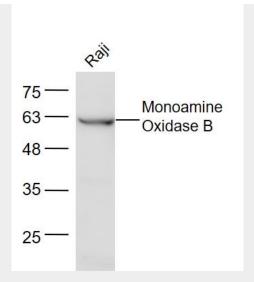


Paraformaldehyde-fixed, paraffin embedded (Human liver carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Monoamine Oxidase B) Polyclonal Antibody, Unconjugated (bs-11297R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Human brain glioma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Monoamine Oxidase B) Polyclonal Antibody, Unconjugated (bs-11297R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.





Sample: Raji Cell (Human) Lysate at 40 ug

Primary: Anti-Monoamine Oxidase B (bs-11297R) at 1/300 dilution

Secondary: HRP conjugated Goat-Anti-rabbit IgG (bs-0295G-HRP) at 1/5000 dilution

Predicted band size: 59 kD Observed band size: 59 kD