

Monoamine Oxidase B Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54448

Product Information

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

Primary Accession P27338

Reactivity Rat, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 58763
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human MAOB/Monoamine

Oxidase B

Epitope Specificity 51-150/520

Isotype IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION 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 NoteThis product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions 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).

Additional Information

Gene ID 4129

Other Names Amine oxidase [flavin-containing] B, 1.4.3.4, Monoamine oxidase type B,

MAO-B, MAOB

Dilution WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-50

0,ELISA=1:5000-10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Storage Store at -20 °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 °C.

Protein Information

Name MAOB (HGNC:6834)

Function Catalyzes the oxidative deamination of primary and some secondary amines

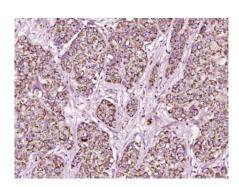
such as neurotransmitters, and exogenous amines including the tertiary amine, neurotoxin 1-methyl-4-phenyl-1,2,3,6- tetrahydropyridine (MPTP), with concomitant reduction of oxygen to hydrogen peroxide and participates in the metabolism of neuroactive and vasoactive amines in the central nervous system 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).

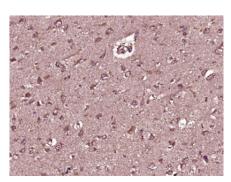
Cellular Location Mitochondrion outer membrane; Single-pass type IV membrane protein;

Cytoplasmic side

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 (AP54448) 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 (AP54448) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

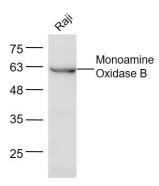
Sample: Raji Cell (Human) Lysate at 40 ug

Primary: Anti-Monoamine Oxidase B (AP54448) 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



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.