10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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 Note	This 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

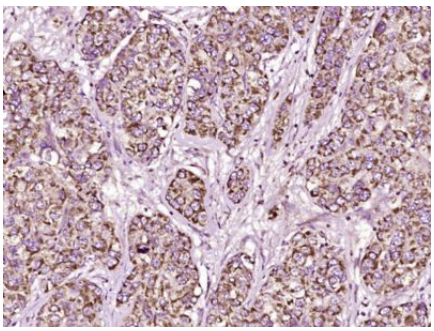
Gene ID	4129
Other Names	Amine oxidase [flavin-containing] B, 1.4.3.4, Monoamine oxidase type B, MAO-B, MAOB

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

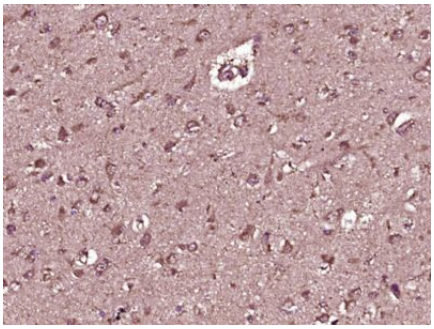
Protein Information

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



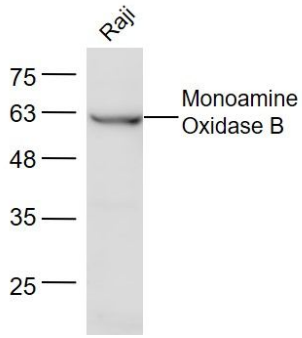
Paraformaldehyde-fixed, paraffin embedded (Human liver carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Monoamine Oxidase B) Polyclonal Antibody, Unconjugated (AP54448) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand 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) instructionsand 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'.