

Monoamine oxidase A+B Rabbit pAb

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Catalog # AP54662

Product Information

Primary Accession	P21397
Reactivity	Human
Predicted	Mouse, Rat, Dog, Pig, Horse, Rabbit, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	59682
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Monoamine oxidase A+B
Epitope Specificity	131-230/527
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; Single-pass type IV membrane protein; Cytoplasmic side.
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.
DISEASE	Defects in MAOA are the cause of Brunner syndrome (BRUNS) [MIM:300615]. Brunner syndrome is a form of X-linked non-dysmorphic mild mental retardation. Male patients are affected by a syndrome of borderline mental retardation and exhibit abnormal behavior, including disturbed regulation of impulsive aggression. Obligate female carriers have normal intelligence and behavior.
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 A and B catalyzes the oxidative deamination of biogenic and xenobiotic amines and has important functions in the metabolism of neuroactive and vasoactive amines in the central nervous system and peripheral tissues. MAOA preferentially oxidizes biogenic amines such as 5-hydroxytryptamine (5-HT), norepinephrine and epinephrine. MAOB preferentially degrades benzylamine and phenylethylamine

Additional Information

Gene ID	4128
Other Names	Amine oxidase [flavin-containing] A, 1.4.3.21, 1.4.3.4, Monoamine oxidase type A, MAO-A, MAOA (HGNC:6833)

Target/Specificity	Heart, liver, duodenum, blood vessels and kidney.
Dilution	Flow-Cyt=1ug/test
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.

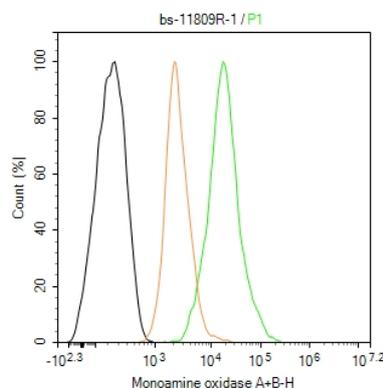
Protein Information

Name	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.

Background

Monoamine oxidase A and B catalyzes the oxidative deamination of biogenic and xenobiotic amines and has important functions in the metabolism of neuroactive and vasoactive amines in the central nervous system and peripheral tissues. MAOA preferentially oxidizes biogenic amines such as 5-hydroxytryptamine (5-HT), norepinephrine and epinephrine. MAOB preferentially degrades benzylamine and phenylethylamine

Images



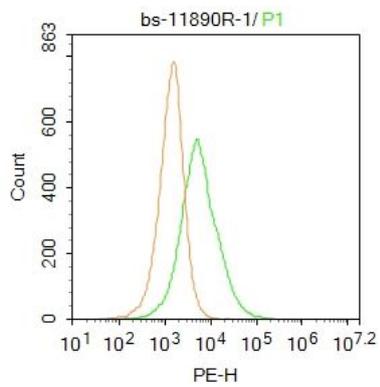
The HepG2 (H) cells were fixed with 4% PFA (10 min at r.t.) and then permeabilized with 90% ice-cold methanol for 20 min at -20°C, the cells then were incubated in 5%BSA to block non-specific protein-protein interactions (30 min at r.t.), followed by secondary antibody incubation for 40 min at room temperature. Primary Antibody (green):Rabbit Anti-Monoamine oxidase A+B antibody (AP54662): 1 µg/10⁶ cells; Isotype Control (orange): Rabbit IgG (AP54662). Blank control (black): PBS. Acquisition of 20,000 events was performed.

Blank control: Hela.

Primary Antibody (green line): Rabbit Anti-Monoamine oxidase A+B antibody (AP54662)

Dilution: 1 µg /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .



Secondary Antibody : Goat anti-rabbit IgG-PE

Dilution: 1 μ g /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 20% PBST for 20 min at room temperature. The cells were then incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

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