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MTO1 Rabbit pAb

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Catalog # AP56886

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9Y2Z2
Reactivity	Rat, Mouse
Predicted	Human, Rabbit, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	79964
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human MTO1
Epitope Specificity	101-200/717
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	Mitochondrial
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a mitochondrial protein thought to be involved in mitochondrial tRNA modification. The encoded protein may also play a role in the expression of the non-syndromic and aminoglycoside-induced deafness phenotypes associated with a specific mutation in the mitochondrial 12S rRNA gene. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	25821
Other Names	5-taurinomethyluridine-[tRNA] synthase subunit MTO1, mitochondrial, Mitochondrial tRNA translation optimization 1, Protein MTO1 homolog, mitochondrial, MTO1 (HGNC:19261)
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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.

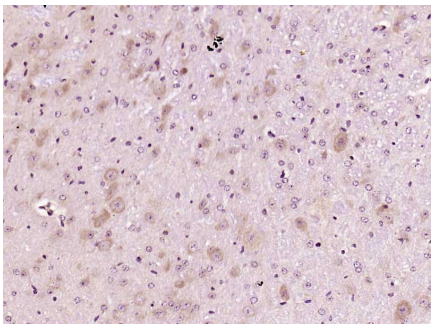
Protein Information

Name	MTO1 (HGNC:19261)
Function	Component of the GTPBP3-MTO1 complex that catalyzes the 5-taurinomethyluridine (taum(5)U) modification at the 34th wobble position (U34) of mitochondrial tRNAs (mt-tRNAs), which plays a role in mt-tRNA decoding and mitochondrial translation (PubMed:29390138, PubMed:33619562). Taum(5)U formation on mammalian mt-tRNA requires the presence of both GTPBP3-mediated GTPase activity and MTO1 catalytic activity (PubMed:29390138).
Cellular Location	Mitochondrion {ECO:0000250|UniProtKB:Q923Z3}.
Tissue Location	Ubiquitously expressed in various tissues, but with a markedly elevated expression in tissues of high metabolic rates including cochlea.

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Images



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); 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 (MTO1) Polyclonal Antibody, Unconjugated (AP56886) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

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