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NAT8L Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21925a

Product Information

Application	WB, IHC-P-Leica, E
Primary Accession	Q8N9F0
Other Accession	Q3UGX3, D3ZVU9
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB55378
Calculated MW	32837

Additional Information

Gene ID	339983
Other Names	N-acetylaspartate synthetase, NAA synthetase, 2.3.1.17, Camello-like protein 3, N-acetyltransferase 8-like protein, NAT8L, CML3
Target/Specificity	This NAT8L antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 59-93 amino acids from human NAT8L.
Dilution	WB~~1:2000 IHC-P-Leica~~1:250 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	NAT8L Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NAT8L (HGNC:26742)
Synonyms	CML3
Function	Catalyzes the synthesis of N-acetylaspartate acid (NAA) from L-aspartate

	and acetyl-CoA (PubMed:19524112, PubMed:19807691, PubMed:20385109). Promotes dopamine uptake by regulating TNF expression (By similarity). Attenuates methamphetamine-induced inhibition of dopamine uptake (PubMed:20385109).
Cellular Location	Cytoplasm. Microsome membrane {ECO:0000250|UniProtKB:D3ZVU9}; Single-pass membrane protein. Mitochondrion membrane; Single-pass membrane protein. Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q3UGX3}; Single-pass membrane protein. Note=Its enzymatic activity contribution is quantitatively larger in mitochondrial compartment than in extramitochondrial compartment.
Tissue Location	Expressed in brain..

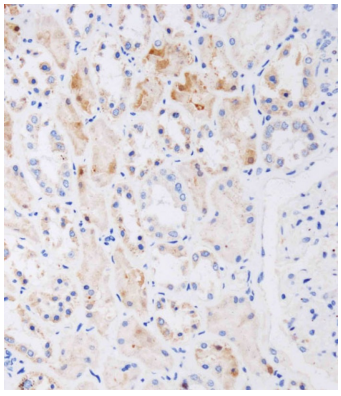
Background

Plays a role in the regulation of lipogenesis by producing N-acetylaspartate acid (NAA), a brain-specific metabolite. NAA occurs in high concentration in brain and its hydrolysis plays a significant part in the maintenance of intact white matter. Promotes dopamine uptake by regulating TNF-alpha expression. Attenuates methamphetamine-induced inhibition of dopamine uptake.

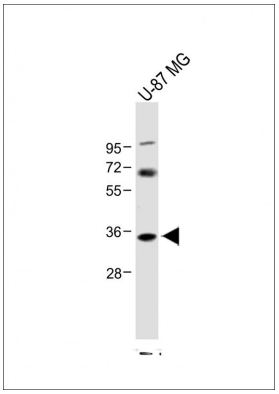
References

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Ota T.,et al.Nat. Genet. 36:40-45(2004).
Popsueva A.E.,et al.Dev. Biol. 234:483-496(2001).
Arun P.,et al.Neurochem. Int. 55:219-225(2009).

Images



Immunohistochemical analysis of AP21925A on paraffin-embedded human kidney tissue was performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:250) for 15min at room temperature. Leica Bond Polymer Refine Detection was used as the secondary antibody.



Anti-NAT8L Antibody (N-Term) at 1:1000 dilution + U-87 MG whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 33 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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