

# NAT8L Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP21925a

## Product Information

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Application	WB, IHC-P-Leica, E
Primary Accession	<a href="#">Q8N9F0</a>
Other Accession	<a href="#">Q3UGX3</a> , <a href="#">D3ZVU9</a>
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB55378
Calculated MW	32837

## Additional Information

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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 0.05% (V/V) Proclin 300. 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

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Name	NAT8L ( <a href="#">HGNC:26742</a> )
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-alpha 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..

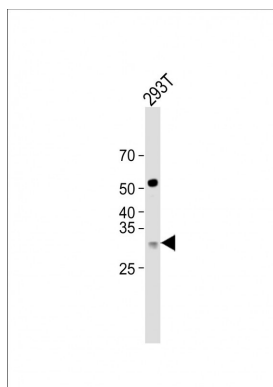
## Background

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.

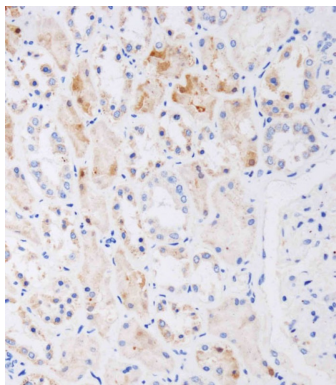
## References

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Brandenberger R.,et al.Nat. Biotechnol. 22:707-716(2004).  
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



All lanes: Anti-NAT8L Antibody (N-Term) at 1:500 dilution + 293T whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 33 KDa Blocking/Dilution buffer: 5% NFDm/TBST.



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.

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