

## **NAT8L Antibody (N-Term)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21925a

### **Specification**

## NAT8L Antibody (N-Term) - Product Information

Application WB, IHC-P-Leica,E

Primary Accession Q8N9F0

Other Accession <u>O3UGX3</u>, <u>D3ZVU9</u>

Reactivity
Predicted
Host
Clonality
Isotype
Human
Mouse, Rat
Rabbit
Rabbit
Rabbit
Polyclonal
Rabbit IgG

### NAT8L Antibody (N-Term) - 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~~1:1000 IHC-P-Leica~~1:250

### **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.

### NAT8L Antibody (N-Term) - 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-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**

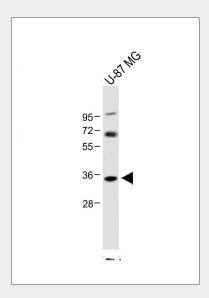
Expressed in brain..

# NAT8L Antibody (N-Term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

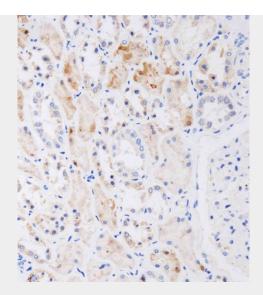
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# NAT8L Antibody (N-Term) - Images



Anti-NAT8L Antibody (N-Term) at 1:1000 dilution + U-87 MG whole cell lysate Lysates/proteins at 20  $\mu$ g 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.





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.

# NAT8L Antibody (N-Term) - 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.

# NAT8L Antibody (N-Term) - References

Hillier L.W.,et al.Nature 434:724-731(2005).
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).