10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

NAT8L Rabbit pAb

Catalog # AP99695

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q8N9F0
Other Accession	Q8N9F0
Reactivity	Human
Predicted	Rat, Pig, Mouse, Rabbit, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	32837
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human NAT8L
Epitope Specificity	201-302/302
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the camello family. Contains 1 N-acetyltransferase domain.
DISEASE	Defects in NAT8L are the cause of N-acetylaspartate deficiency (NACED) [MIM:614063]. A metabolic disorder resulting in truncal ataxia, marked developmental delay, seizures, and secondary microcephaly.
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 single-pass membrane protein, which contains a conserved sequence of the GCN5 or NAT superfamily of N-acetyltransferases and is a member of the N-acyltransferase (NAT) superfamily. This protein is a neuron-specific protein and is the N-acetylaspartate (NAA) biosynthetic enzyme, catalyzing the NAA synthesis from L-aspartate and acetyl-CoA. NAA is a major storage and transport form of acetyl coenzyme A specific to the nervous system. The gene mutation results in primary NAA deficiency (hypoacetylaspartia).

Additional Information

Gene ID	339983
Other Names	CML3; NACED; NAT8-LIKE; 1110038O08Rik; Shati; NAT8L_HUMAN; NAT8L; NAA synthetase; Camello-like protein 3; N-acetyltransferase 8-like protein; 2.3.1.17; NAT8L_MOUSE; Protein Shati; N-acetyltransferase 8 like; N-acetyltransferase 8-like (GCN5-related, putative)
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	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..

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