

ADAT3 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP17369A

Product Information

Application	WB, E
Primary Accession	Q96EY9
Other Accession	NP_612431.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB37815
Calculated MW	39844
Antigen Region	59-87

Additional Information

Gene ID	113179
Other Names	Probable inactive tRNA-specific adenosine deaminase-like protein 3, tRNA-specific adenosine-34 deaminase subunit ADAT3, ADAT3, TAD3
Target/Specificity	This ADAT3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 59-87 amino acids from the N-terminal region of human ADAT3.
Dilution	WB~~1:1000 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	ADAT3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ADAT3
Synonyms	TAD3
Function	Non-catalytic subunit of the tRNA-specific adenosine-34 deaminase

complex, composed of the ADAT2 catalytic subunit and the ADAT3 regulatory subunit, which deaminates adenosine-34 (the first, also called wobble position of the anticodon) to inosine in many tRNAs. Inosine-34 allows the decoding of 3 different nucleotides at the third position of mRNA codons, as inosine is able to pair with U, C, and A. Required for binding of the ADAT2-ADAT3 complex to tRNA through its N- terminus, which rotates with respect to the catalytic domain of the complex, formed by ADAT2 and the ADAT3 C-terminal domain, to position the tRNA anticodon stem-loop correctly in the ADAT2 active site. The ADAT2-ADAT3 complex is required for radial migration of projection neurons in the developing brain cortex, and the catalytic activity of the complex is necessary for this function.

Cellular Location

Nucleus. Cytoplasm. Note=The ADAT2-ADAT3 complex shows a diffuse expression pattern in both the cytoplasm and the nucleus
{ECO:0000250|UniProtKB:Q6PAT0}

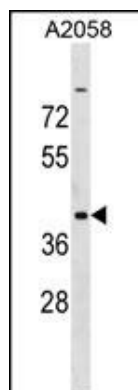
Background

ADAT3 may be involved in deamination of adenosine-34 to inosine in many tRNAs as a regulatory subunit (Potential).

References

Matsuoka, S., et al. Science 316(5828):1160-1166(2007)
Schaub, M., et al. Biochimie 84(8):791-803(2002)

Images



ADAT3 Antibody (N-term) (Cat. #AP17369a) western blot analysis in A2058 cell line lysates (35ug/lane). This demonstrates the ADAT3 antibody detected the ADAT3 protein (arrow).

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