

Anti-CDK5RAP1 Antibody

Rabbit polyclonal antibody to CDK5RAP1

Catalog # AP61320

Product Information

Application	WB, IHC
Primary Accession	Q96SZ6
Other Accession	Q8BTW8
Reactivity	Human, Mouse, Monkey
Host	Rabbit
Clonality	Polyclonal
Calculated MW	67689

Additional Information

Gene ID	51654
Other Names	C20orf34; CDK5 regulatory subunit-associated protein 1; CDK5 activator-binding protein C42
Target/Specificity	Recognizes endogenous levels of CDK5RAP1 protein.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/50 - 1/200) IHC~~WB (1/500 - 1/1000), IHC (1/50 - 1/200)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	CDK5RAP1 (HGNC:15880)
Synonyms	C20orf34
Function	Methylthiotransferase that catalyzes the conversion of N6-(dimethylallyl)adenosine (i(6)A) to 2-methylthio-N6-(dimethylallyl)adenosine (ms(2)i(6)A) at position 37 (adjacent to the 3'-end of the anticodon) of four mitochondrial DNA-encoded tRNAs (Ser(UCN), Phe, Tyr and Trp) (PubMed: 22422838 , PubMed: 25738458 , PubMed: 28981754). Essential for efficient and highly accurate protein translation by the ribosome (PubMed: 22422838 , PubMed: 25738458 , PubMed: 28981754). Specifically inhibits CDK5 activation by CDK5R1 (PubMed: 11882646). Essential for efficient mitochondrial protein synthesis and respiratory chain; shows pathological consequences in mitochondrial disease (PubMed: 25738458).

Cellular Location

Mitochondrion.

Tissue Location

Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas (PubMed:10721722). Expressed in neurons of central nervous tissue (PubMed:10721722, PubMed:11882646) [Isoform 6]: High expression in placenta and lung.

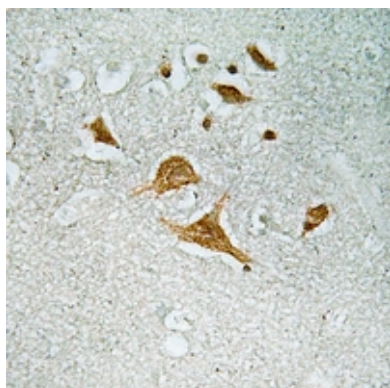
Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CDK5RAP1. The exact sequence is proprietary.

Images



Western blot analysis of CDK5RAP1 expression in mouse lung (A) whole cell lysates.



Immunohistochemical analysis of CDK5RAP1 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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