

CDK5RAP1 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9034b

Specification

CDK5RAP1 Antibody (C-term) - Product Information

Application	FC, IHC-P, WB,E
Primary Accession	Q96SZ6
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	544-571

CDK5RAP1 Antibody (C-term) - Additional Information

Gene ID 51654

Other Names

CDK5 regulatory subunit-associated protein 1, CDK5 activator-binding protein C42, CDK5RAP1, C20orf34

Target/Specificity

This CDK5RAP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 544-571 amino acids from the C-terminal region of human CDK5RAP1.

Dilution

FC~~1:10~50

IHC-P~~1:50~100

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

CDK5RAP1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CDK5RAP1 Antibody (C-term) - 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.

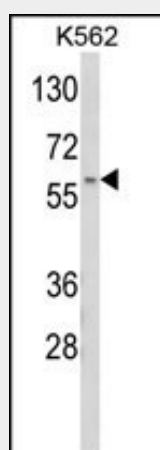
Tissue Location

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.

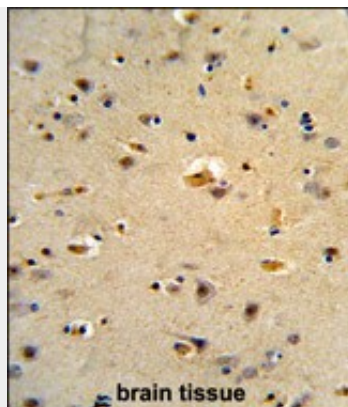
CDK5RAP1 Antibody (C-term) - Protocols

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

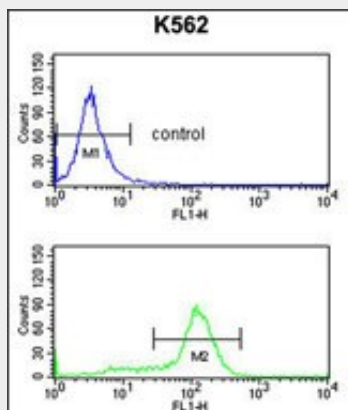
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CDK5RAP1 Antibody (C-term) - Images

Western blot analysis of CDK5RAP1 Antibody (C-term) (Cat. #AP9034b) in K562 cell line lysates (35ug/lane). CDK5RAP1 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human brain tissue reacted with CDK5RAP1 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



CDK5RAP1 Antibody (C-term) (Cat. #AP9034b) flow cytometry analysis of K562 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CDK5RAP1 Antibody (C-term) - Background

Specifically inhibits CDK5 activation by CDK5R1.

CDK5RAP1 Antibody (C-term) - References

Ching Y.-P., et.al., J. Biol. Chem. 277:15237-15240(2002).