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CDK5RAP1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9034b

Specification

CDK5RAP1 Antibody (C-term) - Product Information

Application	**WB, IHC-P, FC,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
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

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.

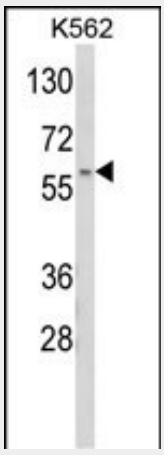
Tissue Location
Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas (PubMed:10721722). Expressed in neurons of central nervous tissue (PubMed:10721722, PubMed:11882646) [Isoform 6]: High expression in placenta and lung.

CDK5RAP1 Antibody (C-term) - Protocols

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

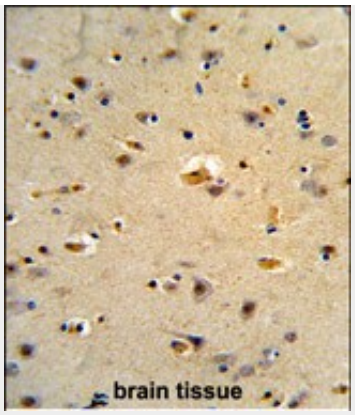
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CDK5RAP1 Antibody (C-term) - Images

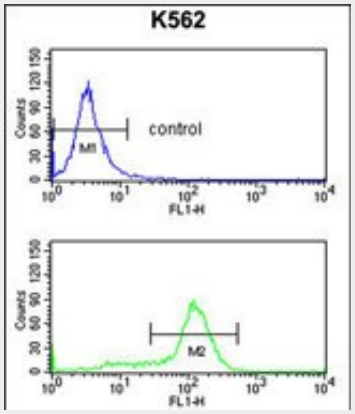


Western blot analysis of CDK5RAP1 Antibody (C-term) (Cat. #AP9034b) in K562 cell line lysates (35ug/lane). CDK5RAP1 (arrow) was detected using the purified Pab.

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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).