

Anti-CDK5RAP1 Antibody

Rabbit polyclonal antibody to CDK5RAP1 Catalog # AP61320

Specification

Anti-CDK5RAP1 Antibody - Product Information

Application WB, IHC
Primary Accession Q96SZ6
Other Accession Q8BTW8

Reactivity Human, Mouse, Monkey

Host Rabbit
Clonality Polyclonal
Calculated MW 67689

Anti-CDK5RAP1 Antibody - Additional Information

Gene ID 51654

Other Names

C20orf34; CDK5 regulatory subunit-associated protein 1; CDK5 activator-binding protein C42

Target/Specificity

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

Dilution

WB~~WB (1/500 - 1/1000), IH (1/50 - 1/200) IHC~~1:100~500

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

Anti-CDK5RAP1 Antibody - 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:<a



href="http://www.uniprot.org/citations/28981754" target="_blank">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" target="_blank">25738458).

Cellular Location

Mitochondrion.

Tissue Location

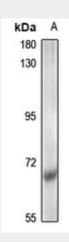
Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas (PubMed:10721722). Expressed in neurons of central nervous tissue (PubMed:10721722, PubMed:11882646) [Isoform 6]: High expression in placenta and lung.

Anti-CDK5RAP1 Antibody - 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

Anti-CDK5RAP1 Antibody - 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.

Anti-CDK5RAP1 Antibody - Background

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