

**Anti-CDK5RAP1 Antibody**  
**Rabbit polyclonal antibody to CDK5RAP1**  
**Catalog # AP61320****Specification**

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**Anti-CDK5RAP1 Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">Q96SZ6</a>
Other Accession	<a href="#">Q8BTW8</a>
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**

Recognizes endogenous levels of CDK5RAP1 protein.

**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:<a href="http://www.uniprot.org/citations/22422838" target="\_blank">22422838</a>, PubMed:<a href="http://www.uniprot.org/citations/25738458" target="\_blank">25738458</a>, PubMed:<a href="http://www.uniprot.org/citations/28981754" target="\_blank">28981754</a>). Essential for

efficient and highly accurate protein translation by the ribosome (PubMed:<a href="http://www.uniprot.org/citations/22422838" target="\_blank">22422838</a>, PubMed:<a href="http://www.uniprot.org/citations/25738458" target="\_blank">25738458</a>, PubMed:<a href="http://www.uniprot.org/citations/28981754" target="\_blank">28981754</a>). Specifically inhibits CDK5 activation by CDK5R1 (PubMed:<a href="http://www.uniprot.org/citations/11882646" target="\_blank">11882646</a>). Essential for efficient mitochondrial protein synthesis and respiratory chain; shows pathological consequences in mitochondrial disease (PubMed:<a href="http://www.uniprot.org/citations/25738458" target="\_blank">25738458</a>).

### Cellular Location

Mitochondrion.

### Tissue Location

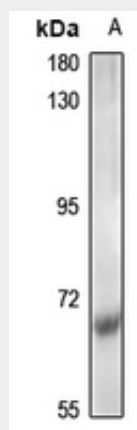
Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas (PubMed:10721722). Expressed in neurons of central nervous tissue (PubMed:10721722, PubMed:11882646) [Isoform 6]: High expression in placenta and lung.

### Anti-CDK5RAP1 Antibody - Protocols

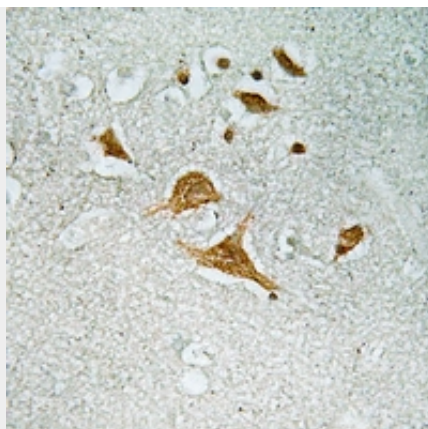
Provided below are standard protocols that you may find useful for product applications.

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

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