

**CDK5RAP1 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP9034b****Specification**

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**CDK5RAP1 Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [Q96SZ6](#)**CDK5RAP1 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 51654**Other Names**

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

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP9034b](/products/AP9034b) was selected from the C-term region of human CDK5RAP1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**CDK5RAP1 Antibody (C-term) Blocking Peptide - 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](http://www.uniprot.org/citations/22422838), PubMed: [25738458](http://www.uniprot.org/citations/25738458), PubMed: [28981754](http://www.uniprot.org/citations/28981754)). Essential for efficient and highly accurate protein translation by the ribosome (PubMed: [22422838](http://www.uniprot.org/citations/22422838), PubMed: [25738458](http://www.uniprot.org/citations/25738458), PubMed: [25738458](http://www.uniprot.org/citations/25738458)).

[28981754](http://www.uniprot.org/citations/28981754)). Specifically inhibits CDK5 activation by CDK5R1 (PubMed:[11882646](http://www.uniprot.org/citations/11882646)). Essential for efficient mitochondrial protein synthesis and respiratory chain; shows pathological consequences in mitochondrial disease (PubMed:[25738458](http://www.uniprot.org/citations/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) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**CDK5RAP1 Antibody (C-term) Blocking Peptide - Images****CDK5RAP1 Antibody (C-term) Blocking Peptide - Background**

Specifically inhibits CDK5 activation by CDK5R1.

**CDK5RAP1 Antibody (C-term) Blocking Peptide - References**

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