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CDK5RAP1 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP9034b

Specification

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 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, PubMed:25738458, PubMed:28981754). Essential for efficient and highly accurate protein translation by the ribosome (PubMed:22422838, PubMed:25738458, PubMed:<a

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