

**CDK5 Activator-binding C42 Polyclonal Antibody**  
**Catalog # AP69019****Specification****CDK5 Activator-binding C42 Polyclonal Antibody - Product Information**

Application	IHC-P
Primary Accession	<a href="#">Q96SZ6</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal

**CDK5 Activator-binding C42 Polyclonal Antibody - Additional Information****Gene ID** 51654**Other Names**

CDK5RAP1; C20orf34; CGI-05; HSPC167; CDK5 regulatory subunit-associated protein 1; CDK5 activator-binding protein C42

**Dilution**

IHC-P~~N/A

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**CDK5 Activator-binding C42 Polyclonal 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.

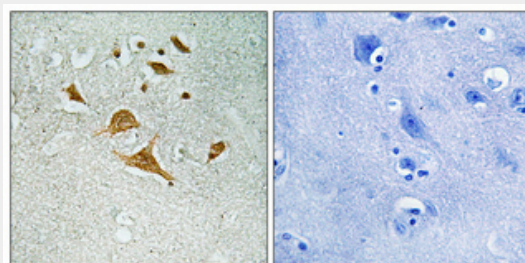
**Tissue Location**

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.

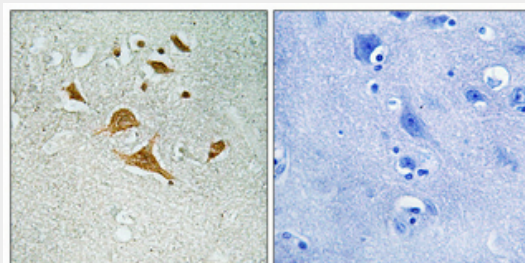
**CDK5 Activator-binding C42 Polyclonal Antibody - Protocols**

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](#)

**CDK5 Activator-binding C42 Polyclonal Antibody - Images**

Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4°,overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4°,overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.

**CDK5 Activator-binding C42 Polyclonal Antibody - Background**

Specifically inhibits CDK5 activation by CDK5R1.