

CABC1 Polyclonal Antibody

Catalog # AP68766

Product Information

Application	WB, IHC-P, IF
Primary Accession	<u>Q8NI60</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	71950

Additional Information

Gene ID	56997
Other Names	ADCK3; CABC1; PP265; Chaperone activity of bc1 complex-like; mitochondrial; Chaperone-ABC1-like; aarF domain-containing protein kinase 3
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

Name	COQ8A {ECO:0000303 PubMed:27499294, ECO:0000312 HGNC:HGNC:16812}
Function	Atypical kinase involved in the biosynthesis of coenzyme Q, also named ubiquinone, an essential lipid-soluble electron transporter for aerobic cellular respiration (PubMed:21296186, PubMed:25498144, PubMed:25540914, PubMed:27499294, PubMed:36302899, PubMed:38425362). Its substrate specificity is still unclear: may act as a protein kinase that mediates phosphorylation of COQ3 (By similarity). According to other reports, acts as a small molecule kinase, possibly a lipid kinase that phosphorylates a prenyl lipid in the ubiquinone biosynthesis pathway, as suggested by its ability to bind coenzyme Q lipid intermediates (PubMed:25498144, PubMed:27499294). However, the small molecule kinase activity was not confirmed by another publication (By similarity). Shows an unusual selectivity for binding ADP over ATP (PubMed:25498144).
Cellular Location	Mitochondrion membrane; Single-pass membrane protein {ECO:0000255, ECO:0000305 PubMed:25216398}

Background

Atypical kinase involved in the biosynthesis of coenzyme Q, also named ubiquinone, an essential lipid-soluble electron transporter for aerobic cellular respiration (PubMed:<u>25498144</u>, PubMed:<u>21296186</u>, PubMed:<u>25540914</u>, PubMed:<u>27499294</u>). Its substrate specificity is unclear: does not show any protein kinase activity (PubMed:<u>25498144</u>, PubMed:<u>27499294</u>). Probably acts as a small molecule kinase, possibly a lipid kinase that phosphorylates a prenyl lipid in the ubiquinone biosynthesis pathway, as suggested by its ability to bind coenzyme Q lipid intermediates (PubMed:<u>25498144</u>, PubMed:<u>27499294</u>). Shows an unusual selectivity for binding ADP over ATP (PubMed:<u>25498144</u>).

Images



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