

CABC1 Antibody (C-term D531)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7116b

Product Information

Application	WB, E
Primary Accession	<u>Q8NI60</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB16712
Calculated MW	71950
Antigen Region	516-545

Additional Information

Gene ID	56997
Other Names	Chaperone activity of bc1 complex-like, mitochondrial, Chaperone-ABC1-like, 2711-, aarF domain-containing protein kinase 3, ADCK3, CABC1
Target/Specificity	This CABC1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 516-545 amino acids from the C-terminal region of human CABC1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CABC1 Antibody (C-term D531) is for research use only and not for use in diagnostic or therapeutic procedures.

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: <u>21296186</u> , PubMed: <u>25498144</u> , PubMed: <u>25540914</u> ,

	PubMed: <u>27499294</u> , PubMed: <u>36302899</u> , PubMed: <u>38425362</u>). 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: <u>25498144</u> , PubMed: <u>27499294</u>). However, the small molecule kinase activity was not confirmed by another publication (By similarity). Shows an unusual selectivity for binding ADP over ATP (PubMed: <u>25498144</u>).
Cellular Location	Mitochondrion membrane; Single-pass membrane protein {ECO:0000255, ECO:0000305 PubMed:25216398}
Tissue Location	Widely expressed, with highest levels in adrenal gland, heart, pancreas, nasal mucosa, stomach, uterus and skeletal muscle.

Background

CABC1 is one of several proteins for which expression is induced by p53 expression. The S. pombe homolog, ABC1, is a chaperone-like protein essential for the proper conformation and functioning of protein complexes in the respiratory chain.

References

Iiizumi, M., et al., Cancer Res. 62(5):1246-1250 (2002).

Images



Western blot analysis of anti-CABC1 Antibody (C-term D531) (Cat.#AP7116b) in 293 cell line lysates (35ug/lane). CABC1 (arrow) was detected using the purified Pab.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.