10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-CABC1 Antibody

Catalog # AP50963

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q8NI60
Reactivity	Human, Mouse, Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	71950

Additional Information

Gene ID	56997
Other Names	CABC1; Chaperone activity of bc1 complex-like mitochondrial; Chaperone-ABC1-like; aarF domain-containing protein kinase 3
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CABC1. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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,

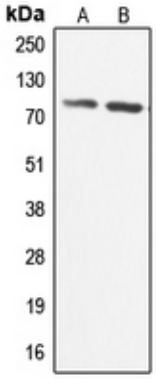
ECO:0000305|PubMed:25216398}

Tissue Location Widely expressed, with highest levels in adrenal gland, heart, pancreas, nasal mucosa, stomach, uterus and skeletal muscle.

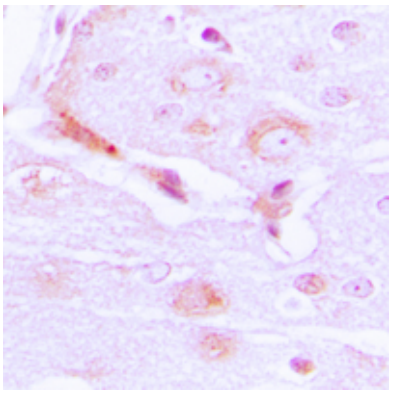
References

Iiizumi M.,et al.Cancer Res. 62:1246-1250(2002).
Ievolella C.,et al.Submitted (MAY-2000) to the EMBL/GenBank/DDBJ databases.
Wan D.,et al.Proc. Natl. Acad. Sci. U.S.A. 101:15724-15729(2004).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).

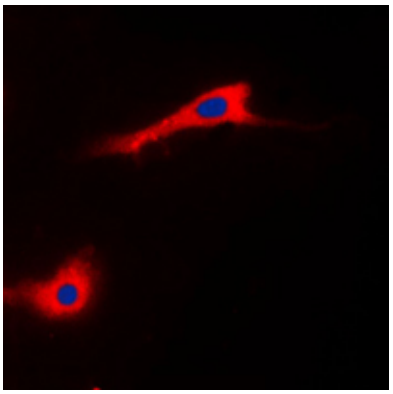
Images



Western blot analysis of CABC1 expression in HeLa (A), U251MG (B) whole cell lysates. (Predicted band size: 71 kD; Observed band size: 72 kD)



Immunohistochemical analysis of CABC1 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of CABC1 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

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