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

Anti-COX17 Antibody

Catalog # AP51111

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q14061
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	6915

Additional Information

Gene ID	10063
Other Names	Cytochrome c oxidase copper chaperone
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human COX17. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 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

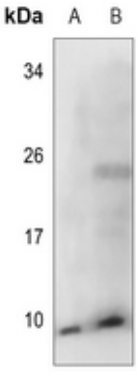
Protein Information

Name	COX17
Function	Copper metallochaperone involved in the assembly of cytochrome c oxidase (respiratory chain complex IV, CIV) (PubMed:15229189, PubMed:19393246, PubMed:31903891, PubMed:35750769). Binds two copper ions and delivers them to metallochaperones SCO1 and SCO2, which co-chaperone the copper ions to the Cu(A) site on the cytochrome c oxidase subunit II (MT-CO2/COX2), and to metallochaperone COX11 which relays the copper to the Cu(B) site on the cytochrome c oxidase subunit I (MT-CO1/COX1) (PubMed:15229189, PubMed:19393246, PubMed:35750769).
Cellular Location	Mitochondrion intermembrane space. Cytoplasm
Tissue Location	Ubiquitous..

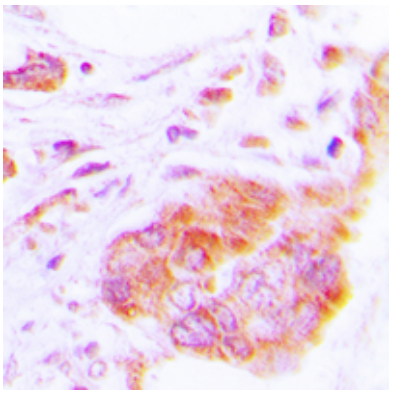
References

Amaravadi R.,et al.Hum. Genet. 99:329-333(1997).
Punter F.A.,et al.Hum. Genet. 107:69-74(2000).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Burkard T.R.,et al.BMC Syst. Biol. 5:17-17(2011).

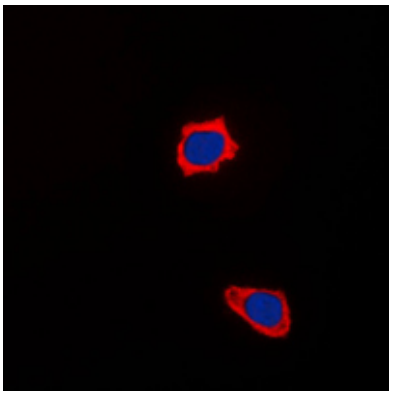
Images



Western blot analysis of COX17 expression in HepG2 (A), Jurkat (B) whole cell lysates. (Predicted band size: 6 kD; Observed band size: 7 kD)



Immunohistochemical analysis of COX17 staining in human lung cancer 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 COX17 staining in HepG2 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).