

COX7A2L Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12338c

Specification

COX7A2L Antibody (Center) - Product Information

Application WB, IHC-P,E **Primary Accession** 014548 NP 004709.2 Other Accession Reactivity Human, Mouse Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 12615 Antigen Region 37-65

COX7A2L Antibody (Center) - Additional Information

Gene ID 9167

Other Names

Cytochrome c oxidase subunit 7A-related protein, mitochondrial, COX7a-related protein, Cytochrome c oxidase subunit VIIa-related protein, EB1, COX7A2L, COX7AR, COX7RP

Target/Specificity

This COX7A2L antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 37-65 amino acids from the Central region of human COX7A2L.

Dilution

WB~~1:1000 IHC-P~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

COX7A2L Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

COX7A2L Antibody (Center) - Protein Information

Name COX7A2L



Synonyms COX7AR, COX7RP

Function Involved in the regulation of oxidative phosphorylation and energy metabolism (By similarity). Necessary for the assembly of mitochondrial respiratory supercomplex (By similarity).

Cellular Location

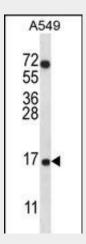
Mitochondrion inner membrane.

COX7A2L Antibody (Center) - Protocols

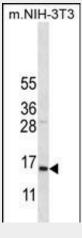
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

COX7A2L Antibody (Center) - Images

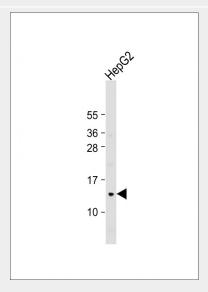


COX7A2L Antibody (Center) (Cat. #AP12338c) western blot analysis in A549 cell line lysates (35ug/lane). This demonstrates the COX7A2L antibody detected the COX7A2L protein (arrow).

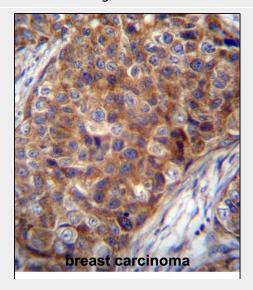




COX7A2L Antibody (Center) (Cat. #AP12338c) western blot analysis in mouse NIH-3T3 cell line lysates (35ug/lane). This demonstrates the COX7A2L antibody detected the COX7A2L protein (arrow).



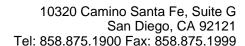
Anti-COX7A2L Antibody (Center) at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at $20~\mu g$ per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 13~kDa Blocking/Dilution buffer: 5% NFDM/TBST.



COX7A2L Antibody (Center) (Cat. #AP12338c)immunohistochemistry analysis in formalin fixed and paraffin embedded human breast carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of COX7A2L Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

COX7A2L Antibody (Center) - Background

Cytochrome c oxidase (COX), the terminal component of the mitochondrial respiratory chain, catalyzes the electron transfer from reduced cytochrome c to oxygen. This component is a heteromeric complex consisting of 3 catalytic subunits encoded by mitochondrial genes and multiple structural subunits encoded by nuclear genes. The mitochondrially-encoded subunits function in electron transfer, and the nuclear-encoded subunits may function in the regulation and assembly of the complex. This nuclear gene





encodes a protein similar to polypeptides 1 and 2 of subunit VIIa in the C-terminal region, and also highly similar to the mouse Sig81 protein sequence. This gene is expressed in all tissues, and upregulated in a breast cancer cell line after estrogen treatment. It is possible that this gene represents a regulatory subunit of COX and mediates the higher level of energy production in target cells by estrogen.

COX7A2L Antibody (Center) - References

Fornuskova, D., et al. Biochem. J. 428(3):363-374(2010) Wheeler, H.E., et al. PLoS Genet. 5 (10), E1000685 (2009): Wang, L., et al. Cancer Epidemiol. Biomarkers Prev. 17(12):3558-3566(2008) Schmidt, T.R., et al. J. Mol. Evol. 57(2):222-228(2003) Lee, N., et al. Am. J. Hum. Genet. 68(2):397-409(2001)