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

COX7A2L Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51900

Product Information

Application	WB
Primary Accession	O14548
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	12615

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
Dilution	WB~~1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	COX7A2L {ECO:0000303|PubMed:27545886, ECO:0000312|HGNC:HGNC:2289}
Function	Assembly factor that mediates the formation of some mitochondrial respiratory supercomplexes (respirasomes), thereby promoting oxidative phosphorylation and energy metabolism (PubMed:27545886, PubMed:30428348, PubMed:33727070, PubMed:36198313). Acts as a molecular adapter that associates with both mitochondrial respiratory complexes III (CIII) and IV (CIV), promoting their association (PubMed:27545886, PubMed:36198313). Mediates the formation of various mitochondrial respiratory supercomplexes, such as MCIII(2)IV(2), composed of two CIII and two CIV, and the CS-respirasome (MCI(1)III(2)IV(2)), composed of one CI, two CIII and two CIV (PubMed:27545886, PubMed:30428348). Not involved in the formation of the canonical respirasome (MCI(1)III(2)IV(1)), composed of one CI, two CIII and one CIV (By similarity). The formation of different respirasomes is important for cell adaptation to oxygen conditions and prevent metabolic exhaustion: supercomplexes mediated by COX7A2L/SCAF1 are required to maintain oxidative phosphorylation upon low oxygen conditions and promote metabolic rewiring toward glycolysis

(PubMed:36198313).

Cellular Location	Mitochondrion inner membrane; Single-pass membrane protein {ECO:0000250|UniProtKB:Q99KD6}

Background

May be a regulatory subunit of cytochrome c oxidase that mediates the higher level of energy production in target cells by estrogen.

References

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Schmidt T.R.,et al.Mol. Biol. Evol. 16:619-626(1999).
Lee N.,et al.Am. J. Hum. Genet. 68:397-409(2001).
Kalnine N.,et al.Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.
Choudhary C.,et al.Science 325:834-840(2009).