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COX7A1 Rabbit pAb

Catalog # AP99643

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P24310
Other Accession	P24310
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	9118
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human COX7A1
Epitope Specificity	22-79/79
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the cytochrome c oxidase VIIa family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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 polypeptide 1 (muscle isoform) of subunit VIIa and the polypeptide 1 is present only in muscle tissues. Other polypeptides of subunit VIIa are present in both muscle and nonmuscle tissues, and are encoded by different genes. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	1346
Other Names	COX7A; COX7AH; COX7AM; CX7A1_HUMAN; COX7A1; Cytochrome c oxidase subunit VIIa-heart (Cytochrome c oxidase subunit VIIa-H); Cytochrome c oxidase subunit VIIa-muscle (Cytochrome c oxidase subunit VIIa-M); cytochrome c oxidase subunit 7A1; cytochrome c oxidase subunit VIIa polypeptide 1 (muscle)
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	COX7A1
Synonyms	COX7AH
Function	Component of the mitochondrial respiratory complex IV (CIV, also named cytochrome c oxidase complex), the last enzyme in the mitochondrial electron transport chain which drives oxidative phosphorylation (By similarity). The CIV complex is the component of the respiratory chain that catalyzes the reduction of oxygen to water (By similarity). Acts as an assembly factor that specifically drives the homodimerization of CIV complexes, mediating the formation of mitochondrial respiratory supercomplexes (respirasomes) containing two CIV: supercomplxes with two molecules of CIV show improved activity (By similarity). Despite being highly expressed in brown adipose tissue, not required for thermogenesis (By similarity).
Cellular Location	Mitochondrion inner membrane {ECO:0000250|UniProtKB:P07470}; Single-pass membrane protein {ECO:0000250|UniProtKB:P07470}

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