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Product datasheet for AP51029PU-N

COX10 (C-term) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	FC, IHC, WB
Recommended Dilution:	**ELISA**: 1/1000. **Western blot**: 1/100 - 1/500. **Immunohistochemistry on paraffin sections:** 1/50 - 1/100. **Flow Cytometry:** 1/10 - 1/50.
Reactivity:	Human
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	KLH conjugated synthetic peptide between 386-414 amino acids from the C-terminal region of human COX1
Specificity:	This antibody reacts to COX10.
Formulation:	PBS State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.09% (W/V) sodium azide
Concentration:	lot specific
Purification:	Affinity chromatography on Protein A
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	48910 Da
Gene Name:	COX10 heme A:farnesyltransferase cytochrome c oxidase assembly factor
Database Link:	Entrez Gene 1352 Human Q12887

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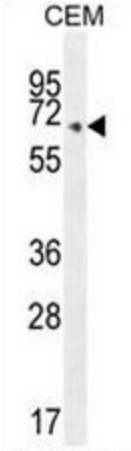
Background: Cytochrome c oxidase (COX), the terminal component of the mitochondrial respiratory chain, catalyzes the electron transfer from reduced cytochrome c to oxygen. This component is a heteromeric complex consisting of 3 catalytic subunits encoded by mitochondrial genes and multiple structural 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 heme A:farnesyltransferase, which is not a structural subunit but required for the expression of functional COX and functions in the maturation of the heme A prosthetic group of COX. This protein is predicted to contain 7-9 transmembrane domains localized in the mitochondrial inner membrane. A gene mutation, which results in the substitution of a lysine for an asparagine (N204K), is identified to be responsible for cytochrome c oxidase deficiency. In addition, this gene is disrupted in patients with CMT1A (Charcot-Marie-Tooth type 1A) duplication and with HNPP (hereditary neuropathy with liability to pressure palsies) deletion.

Synonyms: Heme O synthase, COX-10

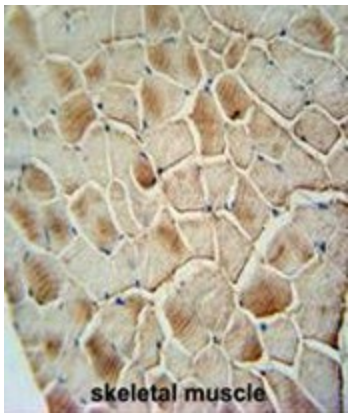
Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Metabolic pathways, Oxidative phosphorylation, Porphyrin and chlorophyll metabolism

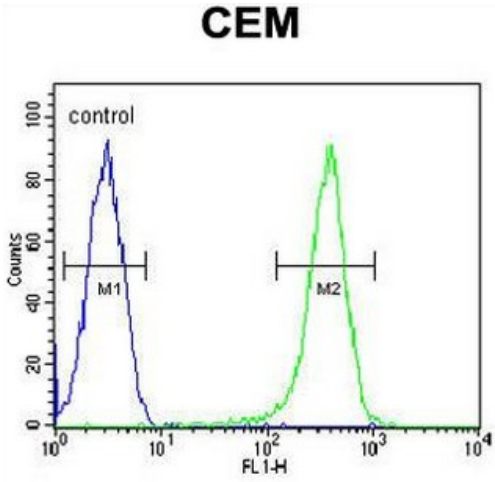
Product images:



COX10 Antibody (C-term) western blot analysis in CEM cell line lysates (35ug/lane).This demonstrates the COX10 antibody detected the COX10 protein (arrow).



COX10 antibody (C-term) immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the COX10 antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



COX10 Antibody (C-term) flow cytometric analysis of CEM cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.