Anti-COX IV Antibody

RT1158

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IP, IF, IHC-P
Molecular Wt:	17kDa

Description: Cytochrome c oxidase (COX) functions as the terminal oxidase of the respiratory chain that uses cytochrome c as an electron donor to drive a proton gradient across the inner mitochondrial membrane. The mammalian COX apoenzyme is a heteromer consisting of three mitochondrial encoded catalytic subunits and several nuclear gene encoded structural subunits. COX contains two iron-coordination sites and two copper-coordination sites. Cytochrome c oxidase IV (COX4) is a nuclear-encoded subunit of COX that may play a role in regulating COX activity. COX4 is expressed ubiquitously in adult human tissue with the strongest levels of expression in the pancreas and moderate expression levels in heart, skeletal muscle and placenta.

Immunogen: Amino acids 86-169 mapping at the C-terminus of COX4 of human origin.

Positive control: Hela, HepG2, MCF7, A-375, human skeletal muscle tissue, human heart muscle tissue.

Subcellular location: Mitochondrion inner membrane

Database links: SwissProt: P13073 Human

Recommended Dilutions:

WB	1:100-1:1,000
IP	1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)
IF	1:50-1:500
IHC-P	1:50-1:500

Storage Buffer: 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Storage Instruction: Store at +4℃

Purity: Immunogen affinity purified.

Images

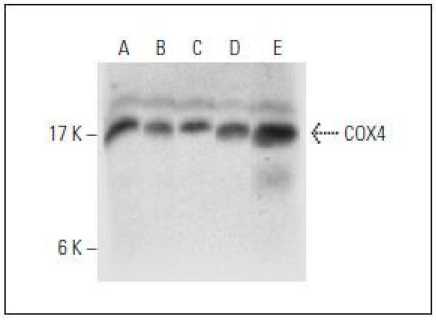

Fig1: Western blot analysis of COX4 expression in HepG2 (A), HeLa(B), MCF7 (C) and A-375 (D) whole cell lysates and human skeletal muscle tissue extract (E).

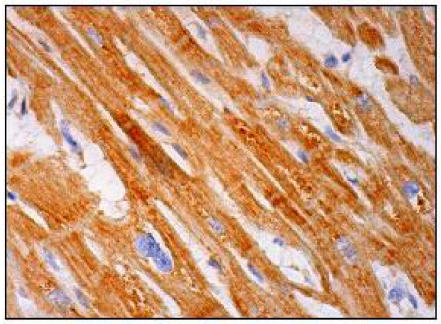

Fig2: Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Vizirianakis, I.S., et al. 2002. Differentiation-dependent repression of c-Myc, B22, COX II and COX IV genes in murine erythroleukemia (MEL) cells. Biochem. Pharmacol. 63: 1009-1017.
2. Hüttemann, M., et al. 2001. Mammalian subunit IV isoforms of cytochrome c oxidase. Gene 267: 111-23