

## Summary

Production Name	COX10 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Rat,Mouse

#### Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

#### Immunogen

Gene Name	COX10
Alternative Names	COX10; Protoheme IX farnesyltransferase; mitochondrial; Heme O synthase
Gene ID	1352.0
SwissProt ID	Q12887. The antiserum was produced against synthesized peptide derived from human
	COX10. AA range:98-147

# Application

Dilution Ratio	WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.
Molecular Weight	49kD

#### Background

#### Product Name: COX10 Rabbit Polyclonal Antibody Catalog #: APRab09265



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 lysdisease:Defects in COX10 are a cause of cytochrome c oxidase deficiency (COX deficiency) [MIM:220110]. COX deficiency is a clinically heterogeneous disorder. The clinical features are ranging from isolated myopathy to severe multisystem disease, with onset from infancy to adulthood.,disease:Defects in COX10 are a cause of Leigh syndrome (LS) [MIM:256000]. LS is a severe neurological disorder characterized by bilaterally symmetrical necrotic lesions in subcortical brain regions.,function:Converts protoheme IX and farnesyl diphosphate to heme O.,similarity:Belongs to the ubiA prenyltransferase family.,

#### **Research Area**

Oxidative phosphorylation;Porphyrin and chlorophyll metabolism;

### Image Data



Western blot analysis of lysate from HeLa cells, using COX10 antibody.





Western blot analysis of KB lysis using COX10 antibody. Antibody was diluted at 1:1000

Western blot analysis of mouse-kidney mouse-brain Hela KB 293T lysis using COX10 antibody. Antibody was diluted at

1:1000

Note

For research use only.