



# COX10 Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-02538
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	WB;ELISA
<b>Gene Name</b>	COX10
<b>Protein Name</b>	Protoheme IX farnesyltransferase mitochondrial
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human COX10. AA range:98-147
<b>Specificity</b>	COX10 Polyclonal Antibody detects endogenous levels of COX10 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	COX10; Protoheme IX farnesyltransferase; mitochondrial; Heme O synthase
<b>Observed Band</b>	49kD
<b>Cell Pathway</b>	Mitochondrion membrane; Multi-pass membrane protein.
<b>Tissue Specificity</b>	Brain,
<b>Function</b>	disease: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.,
<b>Background</b>	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 lys

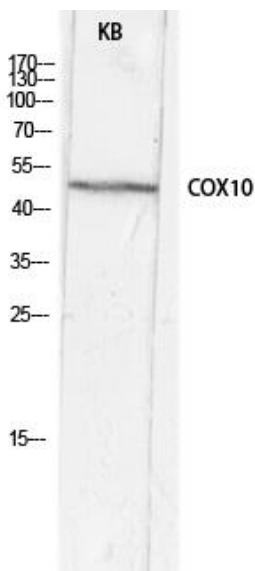
**matters needing attention**

Avoid repeated freezing and thawing!

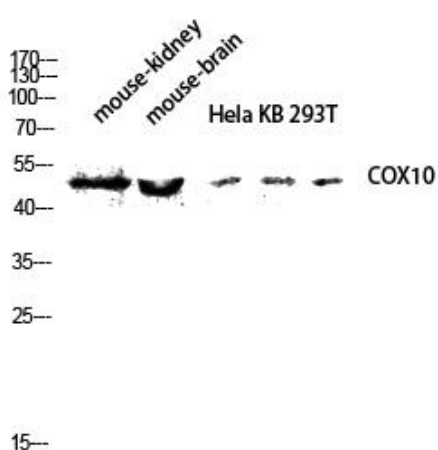
**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

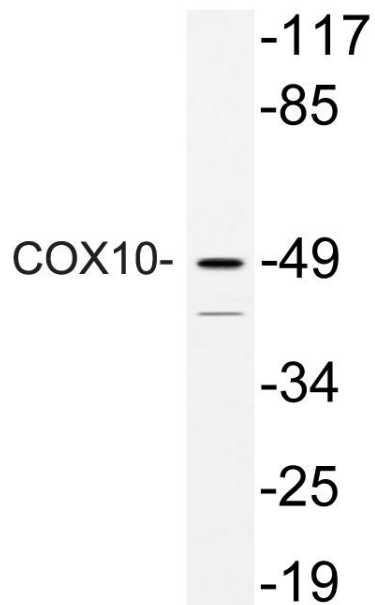
**Products Images**



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



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