



COX10 Monoclonal Antibody

Catalog No	YP-mAb-02538
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	COX10
Immunogen	The antiserum was produced against synthesized peptide derived from human COX10. AA range:98-147
Specificity	COX10 Monoclonal Antibody detects endogenous levels of COX10 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	COX10;Protoheme IX farnesyltransferase mitochondrial;Protoheme IX farnesyltransferase;mitochondrial;Heme O synthase
Observed Band	49kD
Calculated Molecular Weight	49kD
Cell Pathway	Mitochondrion membrane; Multi-pass membrane protein.
Tissue Specificity	Brain,
Function	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.,



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 lys

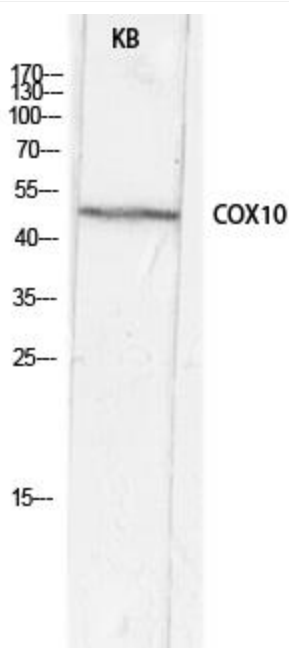
matters needing attention

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 various cells using COX10 Monoclonal Antibody