Best Tools for immunology Research

COX15 Polyclonal Antibody

Catalog No :	YT1070
Reactivity :	Human;Mouse;Rat
Applications :	IHC;IF;ELISA
Target :	COX15
Fields :	>>Oxidative phosphorylation;>>Porphyrin metabolism;>>Metabolic pathways;>>Biosynthesis of cofactors;>>Thermogenesis
Gene Name :	COX15
Protein Name :	Cytochrome c oxidase assembly protein COX15 homolog
Human Gene Id :	1355
Human Swiss Prot No :	Q7KZN9
Mouse Gene Id :	226139
Mouse Swiss Prot No :	Q8BJ03
Immunogen :	The antiserum was produced against synthesized peptide derived from human COX15. AA range:181-230
Specificity :	COX15 Polyclonal Antibody detects endogenous levels of COX15 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight : 46kD

Cell Pathway : Oxidative phosphorylation;Porphyrin and chlorophyll metabolism;

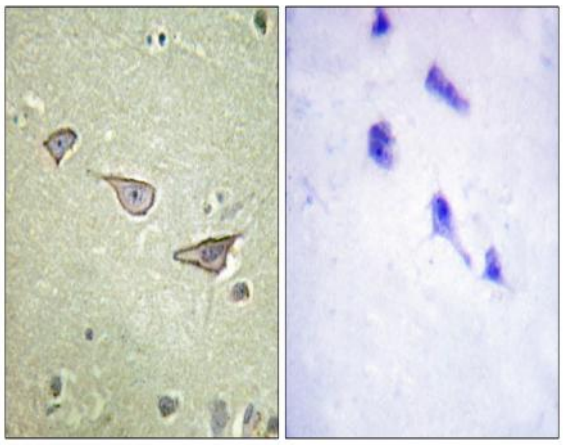
Background : Cytochrome c oxidase (COX), the terminal component of the mitochondrial respiratory chain, catalyzes the electron transfer from reduced cytochrome c to oxygen. This component is a heteromeric complex consisting of 3 catalytic subunits encoded by mitochondrial genes and multiple structural 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 a protein which is not a structural subunit, but may be essential for the biogenesis of COX formation and may function in the hydroxylation of heme O, according to the yeast mutant studies. This protein is predicted to contain 5 transmembrane domains localized in the mitochondrial inner membrane. Alternative splicing of this gene generates two transcript variants diverging

Function : disease:Defects in COX15 are a cause of cytochrome c oxidase deficiency (COX deficiency) [MIM:220110]. COX deficiency is a clinically heterogeneous disorder. The clinical features range from isolated myopathy to severe multisystem disease with onset from infancy to adulthood.,disease:Defects in COX15 are a cause of Leigh syndrome [MIM:256000]. Leigh syndrome is an early-onset progressive neurodegenerative disorder characterized by delayed onset of symptoms, hypotonia, feeding difficulties, failure to thrive, motor regression and brainstem signs. Diagnosis is confirmed by the presence of focal, bilateral lesions in one or more areas of the central nervous system including the brainstem, thalamus, basal ganglia, cerebellum and spinal cord.,function:May be involved in the biosynthesis of heme A.,pathway:Porphyrin metabolism; heme A biosynthesis; heme A from heme O: step 1/1.,similarity:Belo

Subcellular Location : Mitochondrion membrane ; Multi-pass membrane protein .

Expression : Predominantly found in tissues characterized by high rates of oxidative phosphorylation (OxPhos), including muscle, heart, and brain.

Products Images



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using COX15 Antibody. The picture on the right is blocked with the synthesized peptide.