

COX1 Polyclonal Antibody

Cat No: HR1AP10234

For research use only

Overview

Product Name	COX1 Polyclonal Antibody
Source	Rabbit
Applications	WB,ELISA
Species Reactivity	Human,Mouse
Recommended Dilutions	
Immunogen	
Species	Rabbit
Storage	-20°C/1 year
Isotype	
Clonality	
Concentration	1 mg/ml
Observed band	56kDa
GeneID?Human?	MT-CO1 COI COXI MTCO1
Human Swiss-Prot No.	
Cellular localization	
Alternative Names	
Background	<p>catalytic activity:4 ferrocytochrome c + O(2) + 4 H(+) = 4 ferricytochrome c + 2 H(2)O.,disease:Defects in MT-CO1 are a cause of anemia sideroblastic acquired idiopathic (AISA) [MIM:516030]; a disease characterized by inadequate formation of heme and excessive accumulation of iron in mitochondria.,disease:Defects in MT-CO1 are a cause of cytochrome c oxidase deficiency (COX deficiency) [MIM:220110]; also called mitochondrial complex IV deficiency. 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 MT-CO1 are a cause of Leber hereditary optic neuropathy (LHON) [MIM:535000]. LHON is a maternally inherited disease resulting in acute or subacute loss of central vision, due to optic nerve dysfunction. Cardiac conduction defects and neurological defects have also been described in some patients. LHON results from primary mitochondrial DNA mutations affecting the respiratory chain complexes.,disease:Defects in MT-CO1 are associated with recurrent myoglobinuria [MIM:550500]. Myoglobinuria consists of excretion of myoglobin in the urine.,function:Cytochrome c oxidase is the component of the respiratory chain that catalyzes the reduction of oxygen to water. Subunits 1-3 form the functional core of the enzyme complex. CO I is the catalytic subunit of the enzyme. Electrons originating in cytochrome c are transferred via the copper A center of subunit 2 and heme A of subunit 1 to the bimetallic center formed by heme A3 and copper B.,pathway:Energy metabolism; oxidative phosphorylation.,similarity:Belongs to the heme-copper respiratory oxidase family.,</p>