Cytochrome b Monoclonal Antibody

Catalog No	YP-mAb-10776
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;ELISA
Gene Name	MT-CYB
Immunogen	Synthesized peptide derived from human Cytochrome b. at AA range: 331-380
Specificity	Cytochrome b Monoclonal Antibody detects endogenous levels of Cytochrome b
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 1:500-2000, ELISA 1:10000-20000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CYTB;COB;Complex III subunit 3;Complex III subunit III;MT CYB;Cytochrome b; MT-CYB;Cytochrome b (Complex III subunit 3) (Complex III subunit III) (Cytochrome b-c1 complex subunit 3) (Ubiquinol-cytochrome-c reductase complex cytochrome b subunit)
Observed Band	48kD
Calculated Molecular Weight	48kD
Cell Pathway	Mitochondrion inner membrane ; Multi-pass membrane protein .
Tissue Specificity	Bone fossil,Heart,Lymphoblast,Placenta,
Function	cofactor:Binds 2 heme groups non-covalently.,disease:Defects in MT-CYB are a rare cause of mitochondrial dysfunction underlying different myopathies. They include mitochondrial encephalomyopathy, hypertrophic cardiomyopathy (HCM), and sporadic mitochondrial myopathy (MM). In mitochondrial myopathy, exercise intolerance is the predominant symptom. Additional features include lactic acidosis, muscle weakness and/or myoglobinuria. Defects in MTCYB are also found in cases of exercise intolerance accompanied by deafness, mental retardation, retinitis pigmentosa, cataract, growth retardation, epilepsy (multisystem disorder).,disease:Defects in MT-CYB are the cause of cardiomyopathy infantile histiocytoid (CMIH) [MIM:500000]. CMIH is

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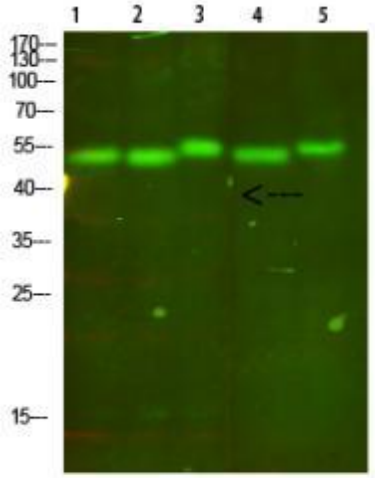
Background	cofactor:Binds 2 heme groups non-covalently.,disease:Defects in MT-CYB are a rare cause of mitochondrial dysfunction underlying different myopathies. They include mitochondrial encephalomyopathy, hypertrophic cardiomyopathy (HCM), and sporadic mitochondrial myopathy (MM). In mitochondrial myopathy, exercise intolerance is the predominant symptom. Additional features include lactic acidosis, muscle weakness and/or myoglobinuria. Defects in MTCYB are also found in cases of exercise intolerance accompanied by deafness, mental retardation, retinitis pigmentosa, cataract, growth retardation, epilepsy (multisystem disorder).,disease:Defects in MT-CYB are the cause of cardiomyopathy infantile histiocytoid (CMIH) [MIM:500000]. CMIH is characterized by the presence of pale granular foamy histiocyte-like cells within the myocardium. It usually affects children younger than 2 years of age, with a clear predominance of females over males. Infants present with dysrhythmia or cardiac arrest, and the clinical course is usually fulminant, sometimes simulating sudden infant death syndrome.,disease:Defects in MT-CYB contribute to 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., function:Component of the ubiquinol-cytochrome c reductase complex (complex III or cytochrome b-c1 complex), which is a respiratory chain that generates an electrochemical potential coupled to ATP synthesis.,miscellaneous:Heme 1 (or BL or b562) is low-potential and absorbs at about 562 nm, and heme 2 (or BH or b566) is high-potential and absorbs at about 566 nm.,similarity:Belongs to the cytochrome b family.,subunit:The bc1 complex contains 11 subunits: 3 respiratory subunits (cytochrome b, cytochrome c1 and Rieske/UQCRFS1), 2 core proteins (UQCRC1/QCR1 and UQCRC2/QCR2) and 6 low-molecular weight proteins (UQCRH/QCR6, UQCRB/QCR7, UQCRQ/QCR8, UQCR10/ QCR9, UQCR11/QCR10 and a cleavage product of Rieske/UQCRFS1).,
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 1,mouse-lung 2,mouse-brain 3,mouse-spleen 4,mouse-kidney 5,mouse-heart cells using primary antibody diluted at 1:500(4°C overnight). Secondary antibody:Goat Anti-mouse IgG IRDye 800(diluted at 1:5000, 25°C, 1 hour)