

Cytochrome b Polyclonal Antibody

Catalog No: YT6095

Reactivity: Human; Mouse

Applications: WB;ELISA

Target: Cytochrome b

Fields: >>Oxidative phosphorylation;>>Metabolic pathways;>>Cardiac muscle

contraction;>>Thermogenesis;>>Non-alcoholic fatty liver disease;>>Alzheimer disease;>>Parkinson disease;>>Amyotrophic lateral sclerosis;>>Huntington disease;>>Prion disease;>>Pathways of neurodegeneration - multiple diseases;>>Chemical carcinogenesis - reactive oxygen species;>>Diabetic

cardiomyopathy

P00156

P00158

Gene Name: MT-CYB

Protein Name: Cytochrome b

Human Gene Id: 4519

Human Swiss Prot

No:

Mouse Gene Id: 17711

Mouse Swiss Prot

No:

Immunogen: Synthesized peptide derived from human Cytochrome b. at AA range: 331-380

Specificity: Cytochrome b Polyclonal Antibody detects endogenous levels of Cytochrome b

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500-2000, ELISA 1:10000-20000

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

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chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

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

Observed Band: 48kD

Cell Pathway: Oxidative phosphorylation; Cardiac muscle contraction; Alzheimer's

disease; Parkinson's disease; Huntington's disease;

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).,

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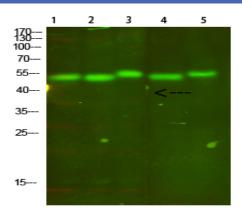
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Subcellular Location:

Mitochondrion inner membrane; Multi-pass membrane protein.

Expression: Bone fossil, Heart, Lymphoblast, Placenta,

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-rabbit IgG IRDye 800(diluted at 1:5000, 25°C, 1 hour)