abcam

Product datasheet

Anti-MT-CYB antibody [5B3-6E3] - N-terminal ab219823

2 Images

Overview

Product name	Anti-MT-CYB antibody [5B3-6E3] - N-terminal
Description	Mouse monoclonal [5B3-6E3] to MT-CYB - N-terminal
Host species	Mouse
Tested applications	**Suitable for:** WB
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide corresponding to Human MT-CYB (N terminal). Database link: P00156
Positive control	WB: Mitochondria from cultured normal control human dermal fibroblasts neonatal (HDFn); Whole cell extract of cultured normal control human dermal fibroblasts neonatal (HDFn).

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.02% Sodium azide Constituents: 0.36% HEPES, 0.87% Sodium chloride
Purity	Protein L purified
Purification notes	Purified from hybridoma cell culture supernatant by Protein L affinity chromatography from fetal bovine serum containing medium (Protein L does not bind bovine IgG).
Clonality	Monoclonal
Clone number	5B3-6E3
Isotype	IgG2b
Light chain type	kappa

Applications

Our Abpromise guarantee covers the use of **ab219823** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 0.05 - 2 µg/ml. Detects a band of approximately 28 kDa (predicted molecular weight: 43 kDa).

Target

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.

Involvement in 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).
Cardiomyopathy, infantile histiocytoid
Leber hereditary optic neuropathy

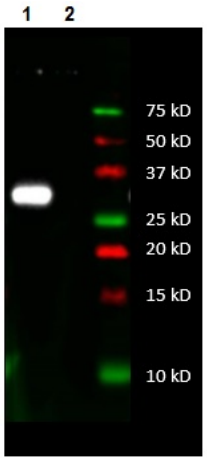
Sequence similarities

Belongs to the cytochrome b family.

Cellular localization

Mitochondrion inner membrane.

Images



Western blot - Anti-MT-CYB antibody [5B3-6E3] - N-terminal (ab219823)

All lanes : Anti-MT-CYB antibody [5B3-6E3] - N-terminal (ab219823) at 0.1 µg/ml

Lane 1 : Mitochondria from cultured normal control human dermal fibroblasts neonatal (HDFn)
Lane 2 : Mitochondria from HDFn cells depleted of mtDNA by long-term proliferation in the presence of ethidium bromide

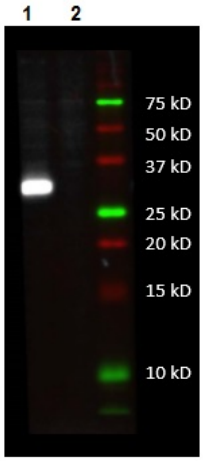
Lysates/proteins at 10 µg per lane.

Secondary
All lanes : HRP-labeled Goat-anti-mouse IgG

Developed using the ECL technique.

Predicted band size: 43 kDa
Observed band size: 28 kDa
why is the actual band size different from the predicted?

Mitochondrial proteins solubilized in 2% SDS were separated by SDS-PAGE and then transferred to PVDF membranes in CAPS buffer.



Western blot - Anti-MT-CYB antibody [5B3-6E3] - N-terminal (ab219823)

All lanes : Anti-MT-CYB antibody [5B3-6E3] - N-terminal (ab219823) at 2 µg/ml

Lane 1 : Whole cell extract of cultured normal control human dermal fibroblasts neonatal (HDFn)
Lane 2 : Whole cell extract HDFn-Rho0 cells depleted of mtDNA by long-term culture in the presence of ethidium bromide

Lysates/proteins at 15 µg per lane.

Secondary
All lanes : HRP-labeled Goat-anti-mouse IgG

Developed using the ECL technique.

Predicted band size: 43 kDa
Observed band size: 28 kDa why is the actual band size different from the predicted?

Proteins were separated by SDS-PAGE and then transferred to PVDF membranes in CAPS buffer.

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors