

### Anti-MTCO2 antibody [MM7D-5A11CA9] ab156031

**4 References**   **5 图像**

#### 概述

产品名称	Anti-MTCO2抗体[MM7D-5A11CA9]
描述	小鼠单克隆抗体[MM7D-5A11CA9] to MTCO2
宿主	Mouse
经测试应用	适用于: ICC/IF, WB, Flow Cyt, IP
种属反应性	与反应: Human, African green monkey 不与反应: Mouse, Rat
免疫原	Tissue, cells or virus. This information is considered to be commercially sensitive.
阳性对照	Human liver and heart mitochondrial extracts; Human heart homogenate; 143B(Human osteosarcoma), HeLa and COS7 cells.
常规说明	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact <a href="mailto:orders@abcam.com">orders@abcam.com</a>.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p> <p>Product was previously marketed under the MitoSciences sub-brand.</p>

#### 性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C.
存储溶液	pH: 7.5 Preservative: 0.02% Sodium azide Constituent: 99% HEPES buffered saline
纯化说明	Near homogeneity as judged by SDS-PAGE. ab156031 was produced in vitro using hybridomas grown in serum-free medium, and then purified by biochemical fractionation.
克隆	单克隆

克隆编号	MM7D-5A11CA9
同种型	IgG1

应用

**The Abpromise guarantee**      **Abpromise™**承诺保证使用ab156031于以下的经测试应用

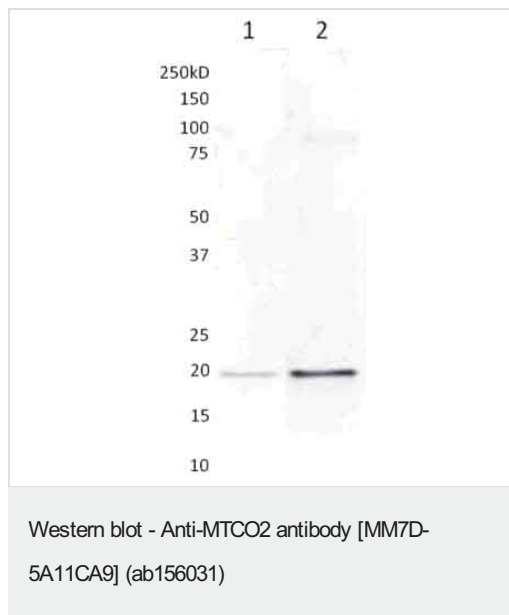
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF		Use a concentration of 1 µg/ml.
WB		Use a concentration of 5 µg/ml. Detects a band of approximately 20 kDa (predicted molecular weight: 25.5 kDa).
Flow Cyt		Use a concentration of 1 µg/ml. <b>ab170190</b> - Mouse monoclonal IgG1 , is suitable for use as an isotype control with this antibody.
IP		Use at an assay dependent concentration.

靶标

功能	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. Subunit 2 transfers the electrons from cytochrome c via its binuclear copper A center to the bimetallic center of the catalytic subunit 1.
疾病相关	Defects in MT-CO2 are a cause of mitochondrial complex IV deficiency (MT-C4D) [MIM:220110]; also known as cytochrome c oxidase deficiency. A disorder of the mitochondrial respiratory chain with heterogeneous clinical manifestations, ranging from isolated myopathy to severe multisystem disease affecting several tissues and organs. Features include hypertrophic cardiomyopathy, hepatomegaly and liver dysfunction, hypotonia, muscle weakness, excercise intolerance, developmental delay, delayed motor development and mental retardation. A subset of patients manifest Leigh syndrome.
序列相似性	Belongs to the cytochrome c oxidase subunit 2 family.
细胞定位	Mitochondrion inner membrane.

图片



**All lanes :** Anti-MTCO2 antibody [MM7D-5A11CA9] (ab156031) at 5 µg/ml

**Lane 1 :** Human Liver Mitochondria Extract

**Lane 2 :** Human Heart Mitochondria Extract

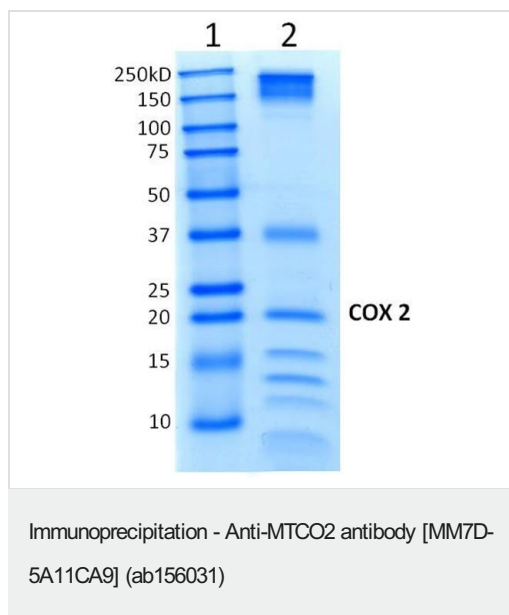
Lysates/proteins at 40 µg per lane.

### Secondary

**All lanes :** Goat polyclonal to Mouse IgG - AP at 1/3000 dilution

**Predicted band size:** 25.5 kDa

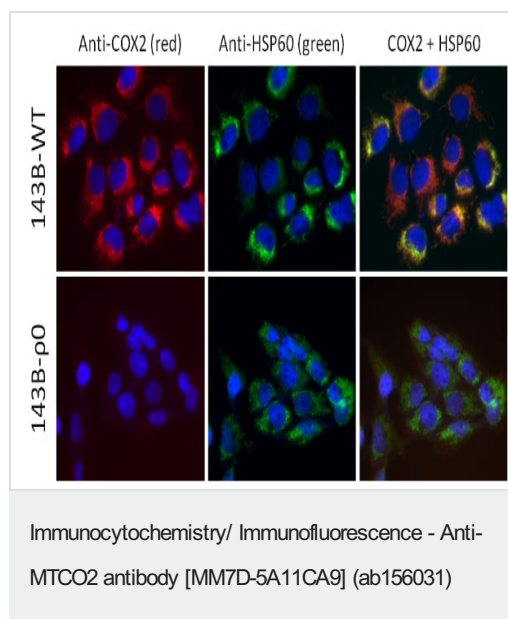
1X Blocking Buffer ([ab126587](#)) in H<sub>2</sub>O was used for blocking and incubation steps.



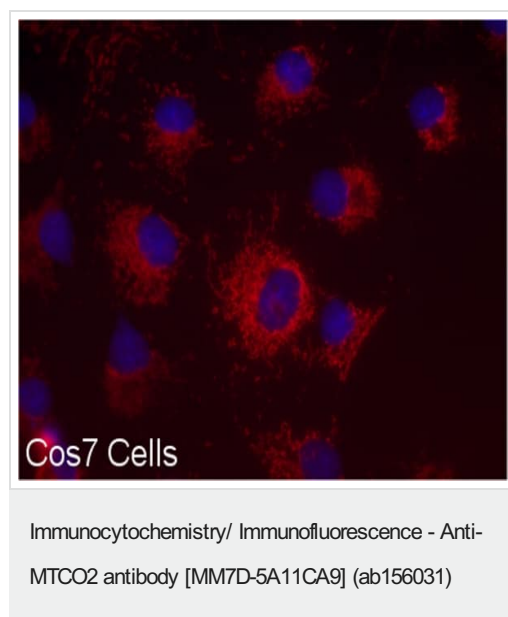
Immunoprecipitation Coomassie stained gel for Anti-COXII antibody (ab156031).

Lane 1: Ladder

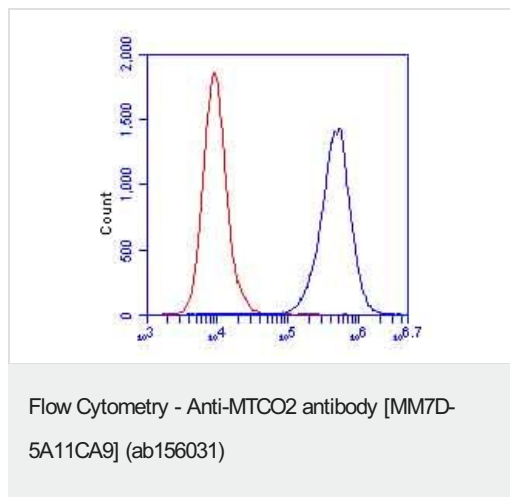
Lane 2: COXII Immunoprecipitated from 1mg Human Heart Homogenate (HHH) Extract. ab156031 anti-COXII captures the entire Cytochrome c oxidase complex in immunoprecipitation.



Immunocytochemical analysis of 143B (Human osteosarcoma) wild type (WT) and mtDNA lacking (?0) cells (paraformaldehyde fixed (4%, 20 min) and Triton X-100 permeabilized (0.1%, 15 min)) labeling COXII with ab156031 at 1µg/ml (red) and anti-HSP60 (**ab46798**) at 1/1000 (green) as a counter stain. Secondary: Alexa 594 goat anti-mouse IgG at 1/1000 and Alexa 488 goat anti-rat IgG at 1/1000. ab156031 shows good reactivity with the wild type (143B-WT) cell line, but shows no signal with the mtDNA lacking (143B-?0) cell line. Cytochrome c oxidase 2 is exclusively encoded by mitochondrial DNA. The anti-HSP60 counter stain antibody identified mitochondria in both cell lines.



Immunocytochemical analysis of COS7 (monkey kidney fibroblast) cells (paraformaldehyde fixed (4%, 20 min) and Triton X-100 permeabilized (0.1%, 15 min)) labeling COXII with ab156031 at 1µg/ml (red). Secondary: Alexa 594 goat anti-mouse IgG at 1/1000. ab156031 shows good reactivity with the COS7 cell type indicating cross reactivity with monkey cytochrome c oxidase.



Flow cytometric analysis of HeLa cells (fixed and permeabilized with methanol) labeling COXII with ab156031 (blue) at 1 µg/ml and an equal amount of an isotype control antibody (red).

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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