PRODUCT INFORMATION



Mitochondria Monoclonal Antibody

Item No. 29283

Overview and Properties

Contents:	This vial contains 100 μ l of protein A-purified monoclonal antibody.
Immunogen:	Human mitochondrial homogenate
Molecular Weight:	~60 kDa
Species Reactivity:	(+) Human
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS
Host:	Mouse
Applications:	Immunocytochemistry (ICC), immunohistochemistry (IHC), and Western blot (WB); the recommended starting dilution for ICC and IHC is 1:100-1:800 and 1:1,000 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Images



WB of HeLa cell lysate showing specific immunolabeling of the ~60 kDa mitochondrial protein.



Immunofluorescence of HeLa cells labeled with Mitochondria Monoclonal Antibody (1:100, green).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Mitochondria are organelles best known for their role in ATP production.¹ They also have roles in cell cycle progression, apoptosis, carbohydrate and fatty acid catabolism, and the synthesis of steroids and other lipids. Mutations in mtDNA or nuclear genes encoding mitochondrial proteins are associated with a wide variety of human pathologies including Parkinson's disease, Charcot-Marie-Tooth (CMT) subtype 2A, and Leber hereditary optic neuropathy (LHON).²⁻⁴ Cayman's Mitochondria Monoclonal Antibody can be used for immunocytochemistry (ICC), immunohistochemistry (IHC), and Western blot (WB) applications. The antibody recognizes an undefined mitochondrial protein at approximately 60 kDa from human samples.

References

- 1. McBride, H.M., Neuspiel, M., and Wasiak, S. Mitochondria: More than just a powerhouse. *Curr. Biol.* **16(14)**, R551-R560 (2006).
- 2. Chan, D.C. Mitochondria: Dynamic organelles in disease, aging, and development. *Cell* **125(7)**, 1241-1252 (2006).
- 3. Raha, S. and Robinson, B.H. Mitochondria, oxygen free radicals, disease and ageing. *Trends Biochem. Sci.* **25(10)**, 502-508 (2000).
- 4. Schapira, A.H.V. Mitochondrial disease. Lancet 368(9529), 70-82 (2006).

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