Resource Summary Report

Generated by FDI Lab - SciCrunch.org on May 13, 2025

MCU (D2Z3B) Rabbit mAb

RRID:AB_2721812
Type: Antibody

Proper Citation

(Cell Signaling Technology Cat# 14997, RRID:AB_2721812)

Antibody Information

URL: http://antibodyregistry.org/AB_2721812

Proper Citation: (Cell Signaling Technology Cat# 14997, RRID:AB_2721812)

Target Antigen: MCU

Host Organism: rabbit

Clonality: monoclonal

Comments: Applications: W, IP

Antibody Name: MCU (D2Z3B) Rabbit mAb

Description: This monoclonal targets MCU

Target Organism: monkey, rat, mouse, human

Clone ID: D2Z3B

Antibody ID: AB_2721812

Vendor: Cell Signaling Technology

Catalog Number: 14997

Record Creation Time: 20231110T033726+0000

Record Last Update: 20240725T010358+0000

Ratings and Alerts

No rating or validation information has been found for MCU (D2Z3B) Rabbit mAb.

No alerts have been found for MCU (D2Z3B) Rabbit mAb.

Data and Source Information

Source: Antibody Registry

Usage and Citation Metrics

We found 18 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.

Bertino F, et al. (2024) Dysregulation of FLVCR1a-dependent mitochondrial calcium handling in neural progenitors causes congenital hydrocephalus. Cell reports. Medicine, 5(7), 101647.

LaMoia TE, et al. (2024) Cytosolic calcium regulates hepatic mitochondrial oxidation, intrahepatic lipolysis, and gluconeogenesis via CAMKII activation. Cell metabolism, 36(10), 2329.

Tawfik I, et al. (2024) Breast cancer cells utilize T3 to trigger proliferation through cellular Ca2+ modulation. Cell communication and signaling : CCS, 22(1), 533.

Ward NP, et al. (2024) Mitochondrial respiratory function is preserved under cysteine starvation via glutathione catabolism in NSCLC. Nature communications, 15(1), 4244.

Uda M, et al. (2024) Effects of hindlimb unloading on the mevalonate and mechanistic target of rapamycin complex 1 signaling pathways in a fast-twitch muscle in rats. Physiological reports, 12(5), e15969.

Jonas E, et al. (2024) CALHM2 is a mitochondrial protein import channel that regulates fatty acid metabolism. Research square.

Gherardi G, et al. (2024) Mitochondrial calcium uptake declines during aging and is directly activated by oleuropein to boost energy metabolism and skeletal muscle performance. Cell metabolism.

Emrich SM, et al. (2023) Orai3 and Orai1 mediate CRAC channel function and metabolic reprogramming in B cells. eLife, 12.

Rodríguez-Prados M, et al. (2023) MICU1 controls the sensitivity of the mitochondrial Ca2+ uniporter to activators and inhibitors. Cell chemical biology, 30(6), 606.

Huo J, et al. (2023) MCUb is an inducible regulator of calcium-dependent mitochondrial metabolism and substrate utilization in muscle. Cell reports, 42(11), 113465.

Zhang Z, et al. (2022) Ruthenium 360 and mitoxantrone inhibit mitochondrial calcium uniporter channel to prevent liver steatosis induced by high-fat diet. British journal of pharmacology, 179(11), 2678.

Tsai CW, et al. (2022) Mechanisms and significance of tissue-specific MICU regulation of the mitochondrial calcium uniporter complex. Molecular cell, 82(19), 3661.

Xue K, et al. (2022) The mitochondrial calcium uniporter engages UCP1 to form a thermoporter that promotes thermogenesis. Cell metabolism, 34(9), 1325.

Shields LY, et al. (2021) Mitochondrial fission is a critical modulator of mutant APP-induced neural toxicity. The Journal of biological chemistry, 296, 100469.

Pereira OR, et al. (2021) Changes in mitochondrial morphology modulate LPS-induced loss of calcium homeostasis in BV-2 microglial cells. Journal of bioenergetics and biomembranes, 53(2), 109.

Bisbach CM, et al. (2020) Mitochondrial Calcium Uniporter (MCU) deficiency reveals an alternate path for Ca2+ uptake in photoreceptor mitochondria. Scientific reports, 10(1), 16041.

Flicker D, et al. (2019) Exploring the In Vivo Role of the Mitochondrial Calcium Uniporter in Brown Fat Bioenergetics. Cell reports, 27(5), 1364.

De La Fuente S, et al. (2018) Spatial Separation of Mitochondrial Calcium Uptake and Extrusion for Energy-Efficient Mitochondrial Calcium Signaling in the Heart. Cell reports, 24(12), 3099.