# Resource Summary Report

Generated by RRID on Aug 3, 2026

## STOCK *Mfn2*$^{tm3Dcc}$/Mmucd

RRID:MMRRC_029902-UCD
Type: Organism

### Proper Citation

RRID:MMRRC_029902-UCD

### Organism Information

**URL:** https://www.mmrrc.org/catalog/sds.php?mmrrc_id=29902

**Proper Citation:** RRID:MMRRC_029902-UCD

**Description:** Mus musculus with name STOCK *Mfn2*$^{tm3Dcc}$/Mmucd from MMRRC.

**Species:** Mus musculus

**Notes:** Research areas: Apoptosis, Cell Biology, Developmental Biology, Neurobiology, Reproduction; Mutation Type: Targeted Mutation ; Collection:

**Phenotype:** kyphosis [MP:0000160]| abnormal cerebellum morphology [MP:0000849]| small cerebellum [MP:0000852]| Purkinje cell degeneration [MP:0000876]| decreased body weight [MP:0001262]| decreased body size [MP:0001265]| hypoactivity [MP:0001402]| impaired coordination [MP:0001405]| abnormal gait [MP:0001406]| hunched posture [MP:0001505]| impaired righting response [MP:0001523]| impaired limb coordination [MP:0001524]| premature death [MP:0002083]| no abnormal phenotype detected [MP:0002169]| abnormal innervation [MP:0002184]| neurodegeneration [MP:0002229]| decreased vertical activity [MP:0002757]| increased neuron apoptosis [MP:0003203]| abnormal dopaminergic neuron morphology [MP:0003243]| loss of dopaminergic neurons [MP:0003244]| abnormal striatum morphology [MP:0004077]| abnormal axonal transport [MP:0004768]| bradykinesia [MP:0005156]| abnormal axon morphology [MP:0005404]| abnormal mitochondrion morphology [MP:0006035]| abnormal Purkinje cell dendrite morphology [MP:0008572]| abnormal respiratory electron transport chain [MP:0010955]| postnatal lethality [MP:0011085]| complete penetrance [MP:0011087]| neonatal lethality [MP:0011088]| complete penetrance [MP:0011091]

**Affected Gene:** Mfn2

**Catalog Number:** 029902-UCD

**Background:** Targeted Mutation

**Database:** Mutant Mouse Resource and Research Center (MMRRC)

**Database Abbreviation:** MMRRC

**Source References:** PMID:17693261, PMID:12527753

**Alternate IDs:** MMRRC_29902-UCD, MMRRC_029902, MMRRC_2992

**Organism Name:** STOCK *Mfn2*$^{tm3Dcc}$/Mmucd

**Record Creation Time:** 20230308T055117+0000

**Record Last Update:** 20260801T124203+0000

## Ratings and Alerts

No rating or validation information has been found for STOCK *Mfn2*$^{tm3Dcc}$/Mmucd.

No alerts have been found for STOCK *Mfn2*$^{tm3Dcc}$/Mmucd.

## Data and Source Information

**Source:** Integrated Animals

**Source Database:** Mutant Mouse Resource and Research Center (MMRRC)

## Usage and Citation Metrics

We found 8 mentions in open access literature.

**Listed below are recent publications.** The full list is available at RRID .

Stoiljkovic M, et al. (2025) Mitofusin 2 controls mitochondrial and synaptic dynamics of suprachiasmatic VIP neurons and related circadian rhythms. The Journal of clinical investigation, 135(13).

Bhatia D, et al. (2022) Conditional deletion of myeloid-specific mitofusin 2 but not mitofusin 1 promotes kidney fibrosis. Kidney international, 101(5), 963.

Miao J, et al. (2021) MFN1 and MFN2 Are Dispensable for Sperm Development and Functions in Mice. International journal of molecular sciences, 22(24).

Garcia BM, et al. (2020) Mice born to females with oocyte-specific deletion of mitofusin 2 have increased weight gain and impaired glucose homeostasis. Molecular human reproduction, 26(12), 938.

Carvalho KF, et al. (2020) Mitofusin 1 is required for oocyte growth and communication with follicular somatic cells. FASEB journal : official publication of the Federation of American Societies for Experimental Biology, 34(6), 7644.

Hernández-Alvarez MI, et al. (2019) Deficient Endoplasmic Reticulum-Mitochondrial Phosphatidylserine Transfer Causes Liver Disease. Cell, 177(4), 881.

Chung KP, et al. (2019) Mitofusins regulate lipid metabolism to mediate the development of lung fibrosis. Nature communications, 10(1), 3390.

Sebastián D, et al. (2016) Mfn2 deficiency links age-related sarcopenia and impaired autophagy to activation of an adaptive mitophagy pathway. The EMBO journal, 35(15), 1677.