

Resource Summary Report

Generated by [NIF](#) on Jul 29, 2026

Mfn2-Myc

RRID:Addgene_23213

Type: Plasmid

Proper Citation

RRID:Addgene_23213

Plasmid Information

URL: <http://www.addgene.org/23213>

Proper Citation: RRID:Addgene_23213

Insert Name: Mfn2

Organism: Mus musculus

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:12527753](#)

Vector Backbone Description: Backbone Size:5000; Vector Backbone:pcDNA3.1(-)/Myc-His; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Comments: 16 Myc tags and His tag at the C-terminus.

Plasmid Name: Mfn2-Myc

Record Creation Time: 20220422T222103+0000

Record Last Update: 20260725T074439+0000

Ratings and Alerts

No rating or validation information has been found for Mfn2-Myc.

No alerts have been found for Mfn2-Myc.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 20 mentions in open access literature.

Listed below are recent publications. The full list is available at [NIF](#) .

Kolitsida P, et al. (2024) Mfn2 induces NCLX-mediated calcium release from mitochondria. *bioRxiv : the preprint server for biology*.

Wang Y, et al. (2023) Atypical peripheral actin band formation via overactivation of RhoA and nonmuscle myosin II in mitofusin 2-deficient cells. *eLife*, 12.

Roverato ND, et al. (2021) Parkin is an E3 ligase for the ubiquitin-like modifier FAT10, which inhibits Parkin activation and mitophagy. *Cell reports*, 34(11), 108857.

Motori E, et al. (2020) Neuronal metabolic rewiring promotes resilience to neurodegeneration caused by mitochondrial dysfunction. *Science advances*, 6(35), eaba8271.

Ballard A, et al. (2020) The tethering function of mitofusin2 controls osteoclast differentiation by modulating the Ca²⁺-NFATc1 axis. *The Journal of biological chemistry*, 295(19), 6629.

Chung E, et al. (2020) Intracellular delivery of Parkin rescues neurons from accumulation of damaged mitochondria and pathological α -synuclein. *Science advances*, 6(18), eaba1193.

Huang NK, et al. (2019) Morphological control of mitochondria as the novel mechanism of *Gastrodia elata* in attenuating mutant huntingtin-induced protein aggregations. *Phytomedicine : international journal of phytotherapy and phytopharmacology*, 59, 152756.

Freyre CAC, et al. (2019) MIGA2 Links Mitochondria, the ER, and Lipid Droplets and Promotes De Novo Lipogenesis in Adipocytes. *Molecular cell*, 76(5), 811.

Ribeiro MF, et al. (2019) Amyloid β Peptide Compromises Neural Stem Cell Fate by Irreversibly Disturbing Mitochondrial Oxidative State and Blocking Mitochondrial Biogenesis and Dynamics. *Molecular neurobiology*, 56(6), 3922.

Wong YC, et al. (2019) Lysosomal Regulation of Inter-mitochondrial Contact Fate and Motility in Charcot-Marie-Tooth Type 2. *Developmental cell*, 50(3), 339.

Shen M, et al. (2019) Reduced mitochondrial fusion and Huntingtin levels contribute to impaired dendritic maturation and behavioral deficits in Fmr1-mutant mice. *Nature neuroscience*, 22(3), 386.

Huang CY, et al. (2018) Inhibition of ERK-Drp1 signaling and mitochondria fragmentation alleviates IGF-IIR-induced mitochondria dysfunction during heart failure. *Journal of molecular and cellular cardiology*, 122, 58.

Chun SK, et al. (2018) Loss of sirtuin 1 and mitofusin 2 contributes to enhanced ischemia/reperfusion injury in aged livers. *Aging cell*, 17(4), e12761.

Pernas L, et al. (2018) Mitochondria Restrict Growth of the Intracellular Parasite *Toxoplasma gondii* by Limiting Its Uptake of Fatty Acids. *Cell metabolism*, 27(4), 886.

Mattie S, et al. (2018) A new mitofusin topology places the redox-regulated C terminus in the mitochondrial intermembrane space. *The Journal of cell biology*, 217(2), 507.

Bahat A, et al. (2018) MTCH2-mediated mitochondrial fusion drives exit from naïve pluripotency in embryonic stem cells. *Nature communications*, 9(1), 5132.

Biel TG, et al. (2016) Sirtuin 1 suppresses mitochondrial dysfunction of ischemic mouse livers in a mitofusin 2-dependent manner. *Cell death and differentiation*, 23(2), 279.

Norkett R, et al. (2016) DISC1-dependent Regulation of Mitochondrial Dynamics Controls the Morphogenesis of Complex Neuronal Dendrites. *The Journal of biological chemistry*, 291(2), 613.

Li L, et al. (2015) p38 MAP kinase-dependent phosphorylation of the Gp78 E3 ubiquitin ligase controls ER-mitochondria association and mitochondria motility. *Molecular biology of the cell*, 26(21), 3828.

Martorell-Riera A, et al. (2014) Mfn2 downregulation in excitotoxicity causes mitochondrial dysfunction and delayed neuronal death. *The EMBO journal*, 33(20), 2388.