

Resource Summary Report

Generated by [RRID](#) on Aug 27, 2026

Mfn1-Myc

RRID:Addgene_23212

Type: Plasmid

Proper Citation

RRID:Addgene_23212

Plasmid Information

URL: <http://www.addgene.org/23212>

Proper Citation: RRID:Addgene_23212

Insert Name: Mfn1

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

Plasmid Name: Mfn1-Myc

Record Creation Time: 20220422T222103+0000

Record Last Update: 20260826T041833+0000

Ratings and Alerts

No rating or validation information has been found for Mfn1-Myc.

No alerts have been found for Mfn1-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 [RRID](#) .

Jiang C, et al. (2024) Targeting mitochondrial dynamics of morphine-responsive dopaminergic neurons ameliorates opiate withdrawal. *The Journal of clinical investigation*, 134(5).

Gatti P, et al. (2023) Mitochondria- and ER-associated actin are required for mitochondrial fusion. *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.

Casellas-Díaz S, et al. (2021) Mfn2 localization in the ER is necessary for its bioenergetic function and neuritic development. *EMBO reports*, 22(9), e51954.

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

Duan X, et al. (2020) Dynamic organelle distribution initiates actin-based spindle migration in mouse oocytes. *Nature communications*, 11(1), 277.

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.

Du M, et al. (2020) Mitofusin 2 but not mitofusin 1 mediates Bcl-XL-induced mitochondrial aggregation. *Journal of cell science*, 133(20).

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.

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.

Wu MJ, et al. (2019) Epithelial-Mesenchymal Transition Directs Stem Cell Polarity via Regulation of Mitofusin. *Cell metabolism*, 29(4), 993.

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.

Muñoz-Úbeda M, et al. (2019) Gemini-Based Lipoplexes Complement the Mitochondrial Phenotype in MFN1-Knockout Mouse Embryonic Fibroblasts. *Molecular pharmaceutics*, 16(12), 4787.

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.

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.

Stafa K, et al. (2014) Functional interaction of Parkinson's disease-associated LRRK2 with members of the dynamin GTPase superfamily. *Human molecular genetics*, 23(8), 2055.

Glauser L, et al. (2011) Parkin promotes the ubiquitination and degradation of the mitochondrial fusion factor mitofusin 1. *Journal of neurochemistry*, 118(4), 636.