

Resource Summary Report

Generated by [nidm-terms](#) on Sep 20, 2026

pRK5-myc-Miro1

RRID:Addgene_47888

Type: Plasmid

Proper Citation

RRID:Addgene_47888

Plasmid Information

URL: <http://www.addgene.org/47888>

Proper Citation: RRID:Addgene_47888

Insert Name: Miro1

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:12482879](#)

Vector Backbone Description: Vector Backbone:pRK5-myc; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Plasmid Name: pRK5-myc-Miro1

Record Creation Time: 20220422T222246+0000

Record Last Update: 20260919T091914+0000

Ratings and Alerts

No rating or validation information has been found for pRK5-myc-Miro1.

No alerts have been found for pRK5-myc-Miro1.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 13 mentions in open access literature.

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

Endoni BT, et al. (2025) MIRO1 Is Required for Dynamic Increases in Mitochondria-ER Contact Sites and Mitochondrial ATP During the Cell Cycle. *Cells*, 14(7).

Wu C, et al. (2024) Altered anterograde axonal transport of mitochondria in cultured striatal neurons of a knock-in mouse model of Huntington's disease. *Biochemical and biophysical research communications*, 691, 149246.

Covill-Cooke C, et al. (2024) Shared structural features of Miro binding control mitochondrial homeostasis. *The EMBO journal*, 43(4), 595.

Liiv M, et al. (2024) ER calcium depletion as a key driver for impaired ER-to-mitochondria calcium transfer and mitochondrial dysfunction in Wolfram syndrome. *Nature communications*, 15(1), 6143.

Guill??n-Samander A, et al. (2021) VPS13D bridges the ER to mitochondria and peroxisomes via Miro. *The Journal of cell biology*, 220(5).

Wang F, et al. (2021) MICAL2PV suppresses the formation of tunneling nanotubes and modulates mitochondrial trafficking. *EMBO reports*, 22(7), e52006.

Agarwal S, et al. (2020) Perinuclear mitochondrial clustering, increased ROS levels, and HIF1 are required for the activation of HSF1 by heat stress. *Journal of cell science*, 133(13).

Kalinski AL, et al. (2019) Deacetylation of Miro1 by HDAC6 blocks mitochondrial transport and mediates axon growth inhibition. *The Journal of cell biology*, 218(6), 1871.

Kay LJ, et al. (2019) Proteomics and bioinformatics analyses identify novel cellular roles outside mitochondrial function for human miro GTPases. *Molecular and cellular biochemistry*, 451(1-2), 21.

Schiavon CR, et al. (2019) ELMOD2 regulates mitochondrial fusion in a mitofusin-dependent manner, downstream of ARL2. *Molecular biology of the cell*, 30(10), 1198.

Walch L, et al. (2018) GBF1 and Arf1 interact with Miro and regulate mitochondrial positioning within cells. *Scientific reports*, 8(1), 17121.

Lawrence EJ, et al. (2016) Mitochondria-cytoskeleton associations in mammalian cytokinesis. *Cell division*, 11, 3.

Jackson JG, et al. (2015) Reciprocal Regulation of Mitochondrial Dynamics and Calcium Signaling in Astrocyte Processes. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 35(45), 15199.