

Resource Summary Report

Generated by [NIF](#) on Aug 10, 2026

pRK5-Myc-Parkin

RRID:Addgene_17612

Type: Plasmid

Proper Citation

RRID:Addgene_17612

Plasmid Information

URL: <http://www.addgene.org/17612>

Proper Citation: RRID:Addgene_17612

Insert Name: Parkin

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:11078524](#)

Vector Backbone Description: Backbone Size:4800; Vector Backbone:pRK5-Myc; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Plasmid Name: pRK5-Myc-Parkin

Record Creation Time: 20220422T222017+0000

Record Last Update: 20260808T081302+0000

Ratings and Alerts

No rating or validation information has been found for pRK5-Myc-Parkin.

No alerts have been found for pRK5-Myc-Parkin.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 17 mentions in open access literature.

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

Hubbi ME, et al. (2026) The HIF-2 transcription factor mediates resistance to ferroptosis in pancreatic cancer. *Molecular cell*, 86(7), 1260.

Levi-D'Ancona E, et al. (2025) TRAF6 integrates innate immune signals to regulate glucose homeostasis via Parkin-dependent and Parkin-independent mitophagy. *Science advances*, 11(41), eadw4153.

Fang S, et al. (2025) Engineering a cell-based orthogonal ubiquitin transfer cascade for profiling the substrates of RBR E3 Parkin. *iScience*, 28(7), 112913.

Quiles JM, et al. (2023) Deciphering functional roles and interplay between Beclin1 and Beclin2 in autophagosome formation and mitophagy. *Science signaling*, 16(770), eabo4457.

Botta S, et al. (2023) Dosage sensitivity to Pumilio1 variants in the mouse brain reflects distinct molecular mechanisms. *The EMBO journal*, 42(11), e112721.

Franci L, et al. (2022) MAPK15 protects from oxidative stress-dependent cellular senescence by inducing the mitophagic process. *Aging cell*, 21(7), e13620.

Kocaturk NM, et al. (2022) Novel protein complexes containing autophagy and UPS components regulate proteasome-dependent PARK2 recruitment onto mitochondria and PARK2-PARK6 activity during mitophagy. *Cell death & disease*, 13(11), 947.

Lim Y, et al. (2021) Palmitate reduces starvation-induced ER stress by inhibiting ER-phagy in hypothalamic cells. *Molecular brain*, 14(1), 65.

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.

Hammerling BC, et al. (2020) Isolation of Rab5-positive endosomes reveals a new mitochondrial degradation pathway utilized by BNIP3 and Parkin. *Small GTPases*, 11(1), 69.

Kim S, et al. (2020) Tanycytic TSPO inhibition induces lipophagy to regulate lipid metabolism and improve energy balance. *Autophagy*, 16(7), 1200.

Zhu M, et al. (2018) Parkinson's disease-linked Parkin mutations impair glutamatergic signaling in hippocampal neurons. *BMC biology*, 16(1), 100.

Hammerling BC, et al. (2017) A Rab5 endosomal pathway mediates Parkin-dependent mitochondrial clearance. *Nature communications*, 8, 14050.

Chung KM, et al. (2015) Calpain Determines the Propensity of Adult Hippocampal Neural Stem Cells to Autophagic Cell Death Following Insulin Withdrawal. *Stem cells (Dayton, Ohio)*, 33(10), 3052.

Birsa N, et al. (2014) Lysine 27 ubiquitination of the mitochondrial transport protein Miro is dependent on serine 65 of the Parkin ubiquitin ligase. *The Journal of biological chemistry*, 289(21), 14569.

Song L, et al. (2012) Mutant Twinkle increases dopaminergic neurodegeneration, mtDNA deletions and modulates Parkin expression. *Human molecular genetics*, 21(23), 5147.

Cui M, et al. (2010) Perturbations in mitochondrial dynamics induced by human mutant PINK1 can be rescued by the mitochondrial division inhibitor mdivi-1. *The Journal of biological chemistry*, 285(15), 11740.