

Resource Summary Report

Generated by [dkNET](#) on Aug 4, 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: 20260801T080853+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 16 mentions in open access literature.

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

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.