

Resource Summary Report

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

pcDNA3-myc-CUL3

RRID:Addgene_19893

Type: Plasmid

Proper Citation

RRID:Addgene_19893

Plasmid Information

URL: <http://www.addgene.org/19893>

Proper Citation: RRID:Addgene_19893

Insert Name: cullin 3

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:10230407](#)

Vector Backbone Description: Backbone Marker:Invitrogen; Backbone Size:5512; Vector Backbone:pcDNA3-myc; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Comments: Y201C mutation detected in Addgene sequence. Xiong lab says that the plasmid used in the publication also had Y201C mutation and it is not known to affect function.

Plasmid Name: pcDNA3-myc-CUL3

Record Creation Time: 20220422T222048+0000

Record Last Update: 20260725T074414+0000

Ratings and Alerts

No rating or validation information has been found for pcDNA3-myc-CUL3.

No alerts have been found for pcDNA3-myc-CUL3.

Data and Source Information

Usage and Citation Metrics

We found 22 mentions in open access literature.

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

Baptista SJS, et al. (2025) CSP ubiquitylation favours Plasmodium berghei survival during early liver stage infection. Scientific reports, 15(1), 14498.

Zhu S, et al. (2025) Isoform-specific function of NSD3 in DNA replication stress confers resistance to PARP inhibitors in prostate cancer. Molecular cell, 85(14), 2673.

Cuneo MJ, et al. (2023) Higher-order SPOP assembly reveals a basis for cancer mutant dysregulation. Molecular cell, 83(5), 731.

Yin C, et al. (2021) Proteolysis of γ -tubulin small complex proteins is mediated by the ubiquitin-proteasome system. FEBS letters, 595(15), 1987.

Usher ET, et al. (2021) Intrinsically disordered substrates dictate SPOP subnuclear localization and ubiquitination activity. The Journal of biological chemistry, 296, 100693.

Luo A, et al. (2020) Label-Free Interactome Analysis Revealed an Essential Role of CUL3-KEAP1 Complex in Mediating the Ubiquitination and Degradation of PHD2. Journal of proteome research, 19(1), 260.

Bayraktar G, et al. (2020) Synaptic control of DNA methylation involves activity-dependent degradation of DNMT3A1 in the nucleus. Neuropsychopharmacology : official publication of the American College of Neuropsychopharmacology, 45(12), 2120.

Gao C, et al. (2019) Molecular basis of cullin-3 (Cul3) ubiquitin ligase subversion by vaccinia virus protein A55. The Journal of biological chemistry, 294(16), 6416.

Pallett MA, et al. (2019) Vaccinia Virus BBK E3 Ligase Adaptor A55 Targets Importin-Dependent NF- κ B Activation and Inhibits CD8⁺ T-Cell Memory. Journal of virology, 93(10).

Bouchard JJ, et al. (2018) Cancer Mutations of the Tumor Suppressor SPOP Disrupt the Formation of Active, Phase-Separated Compartments. Molecular cell, 72(1), 19.

Zhou W, et al. (2018) UBE2M Is a Stress-Inducible Dual E2 for Neddylation and Ubiquitylation that Promotes Targeted Degradation of UBE2F. Molecular cell, 70(6), 1008.

Fong KW, et al. (2018) TRIM28 protects TRIM24 from SPOP-mediated degradation and promotes prostate cancer progression. Nature communications, 9(1), 5007.

Hsu PH, et al. (2017) Cullin 7 mediates proteasomal and lysosomal degradations of rat Eag1 potassium channels. Scientific reports, 7, 40825.

Ding S, et al. (2016) Comparative Proteomics Reveals Strain-Specific β -TrCP Degradation via Rotavirus NSP1 Hijacking a Host Cullin-3-Rbx1 Complex. *PLoS pathogens*, 12(10), e1005929.

Mudhasani R, et al. (2016) Protein Kinase R Degradation Is Essential for Rift Valley Fever Virus Infection and Is Regulated by SKP1-CUL1-F-box (SCF)FBXW11-NSs E3 Ligase. *PLoS pathogens*, 12(2), e1005437.

Gong W, et al. (2015) Kelch Repeat and BTB Domain Containing Protein 5 (Kbtbd5) Regulates Skeletal Muscle Myogenesis through the E2F1-DP1 Complex. *The Journal of biological chemistry*, 290(24), 15350.

Chen YA, et al. (2015) The Cullin 4A/B-DDB1-Cereblon E3 Ubiquitin Ligase Complex Mediates the Degradation of CLC-1 Chloride Channels. *Scientific reports*, 5, 10667.

Pisano A, et al. (2015) CRL3IBTK Regulates the Tumor Suppressor Pdcd4 through Ubiquitylation Coupled to Proteasomal Degradation. *The Journal of biological chemistry*, 290(22), 13958.

Pentecost M, et al. (2015) Evidence for ubiquitin-regulated nuclear and subnuclear trafficking among Paramyxovirinae matrix proteins. *PLoS pathogens*, 11(3), e1004739.

Mahammad S, et al. (2013) Giant axonal neuropathy-associated gigaxonin mutations impair intermediate filament protein degradation. *The Journal of clinical investigation*, 123(5), 1964.