

Resource Summary Report

Generated by [NIF](#) on Jul 30, 2026

pCW57.1-4EBP1_4xAla

RRID:Addgene_38240

Type: Plasmid

Proper Citation

RRID:Addgene_38240

Plasmid Information

URL: <http://www.addgene.org/38240>

Proper Citation: RRID:Addgene_38240

Insert Name: 4EBP1

Organism: Rattus norvegicus

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:22552098](#)

Vector Backbone Description: Backbone Marker:Broad Insitute; Backbone Size:5000; Vector Backbone:pCW57.1; Vector Types:Mammalian Expression, Lentiviral, Doxycycline inducible; Bacterial Resistance:Ampicillin

Plasmid Name: pCW57.1-4EBP1_4xAla

Relevant Mutation: T37A, T46A, S65A, T70A (dominant negative)

Record Creation Time: 20220422T222201+0000

Record Last Update: 20260725T074628+0000

Ratings and Alerts

No rating or validation information has been found for pCW57.1-4EBP1_4xAla.

No alerts have been found for pCW57.1-4EBP1_4xAla.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 15 mentions in open access literature.

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

Wang S, et al. (2025) Noncanonical feedback loop between "RIP3-MLKL" and "4EBP1-eIF4E" promotes neuronal necroptosis. *MedComm*, 6(3), e70107.

Boyer JA, et al. (2024) eIF4A controls translation of estrogen receptor alpha and is a therapeutic target in advanced breast cancer. *bioRxiv : the preprint server for biology*.

Kantzer CG, et al. (2022) ID1 and CEBPA coordinate epidermal progenitor cell differentiation. *Development (Cambridge, England)*, 149(22).

Lee BJ, et al. (2021) Selective inhibitors of mTORC1 activate 4EBP1 and suppress tumor growth. *Nature chemical biology*, 17(10), 1065.

Zhang Y, et al. (2021) mTORC1 couples cyst(e)ine availability with GPX4 protein synthesis and ferroptosis regulation. *Nature communications*, 12(1), 1589.

Lee H, et al. (2020) STAT3-mediated MLST8 gene expression regulates cap-dependent translation in cancer cells. *Molecular oncology*, 14(8), 1850.

Ang Z, et al. (2019) Novel AU-rich proximal UTR sequences (APS) enhance CXCL8 synthesis upon the induction of rpS6 phosphorylation. *PLoS genetics*, 15(4), e1008077.

Woodcock HV, et al. (2019) The mTORC1/4E-BP1 axis represents a critical signaling node during fibrogenesis. *Nature communications*, 10(1), 6.

Figlia G, et al. (2017) Dual function of the PI3K-Akt-mTORC1 axis in myelination of the peripheral nervous system. *eLife*, 6.

Kang J, et al. (2016) Amino acid-dependent signaling via S6K1 and MYC is essential for regulation of rDNA transcription. *Oncotarget*, 7(31), 48887.

Llanos S, et al. (2016) Stabilization of p21 by mTORC1/4E-BP1 predicts clinical outcome of head and neck cancers. *Nature communications*, 7, 10438.

Olejniczak SH, et al. (2016) Coordinated Regulation of Cap-Dependent Translation and MicroRNA Function by Convergent Signaling Pathways. *Molecular and cellular biology*, 36(18), 2360.

Komatsu N, et al. (2015) mTORC1 upregulation via ERK-dependent gene expression change confers intrinsic resistance to MEK inhibitors in oncogenic KRas-mutant cancer cells. *Oncogene*, 34(45), 5607.

Momcilovic M, et al. (2015) Heightening Energetic Stress Selectively Targets LKB1-Deficient Non-Small Cell Lung Cancers. *Cancer research*, 75(22), 4910.

Grzmil M, et al. (2014) MNK1 pathway activity maintains protein synthesis in rapalog-treated gliomas. *The Journal of clinical investigation*, 124(2), 742.