

Resource Summary Report

Generated by [RRID](#) on Aug 20, 2026

[pEBG?AMPK ?1\(1?312\)](#)

RRID:Addgene_27632

Type: Plasmid

Proper Citation

RRID:Addgene_27632

Plasmid Information

URL: <http://www.addgene.org/27632>

Proper Citation: RRID:Addgene_27632

Insert Name: AMPK ?1(1?312)

Organism: Rattus norvegicus

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:21205641](#)

Vector Backbone Description: Backbone Size:6100; Vector Backbone:pEBG; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Comments: This plasmid was first described in the following article: Crute et al. Functional domains of the alpha1 catalytic subunit of the AMP-activated protein kinase. J Biol Chem (1998) vol. 273 (52) pp. 35347-54.

Plasmid Name: pEBG?AMPK ?1(1?312)

Relevant Mutation: Constitutively active by truncation after amino acid 312.

Record Creation Time: 20220422T222124+0000

Record Last Update: 20260815T081305+0000

Ratings and Alerts

No rating or validation information has been found for pEBG?AMPK ?1(1?312).

No alerts have been found for pEBG?AMPK ?1(1?312).

Data and Source Information

Usage and Citation Metrics

We found 12 mentions in open access literature.

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

Rong D, et al. (2025) Suppression of the LKB1-AMPK-SLC7A11-GSH signaling pathway sensitizes NSCLC to albumin-bound paclitaxel via oxidative stress. *Redox biology*, 81, 103567.

Tseng HI, et al. (2022) A novel AMPK activator shows therapeutic potential in hepatocellular carcinoma by suppressing HIF1 α -mediated aerobic glycolysis. *Molecular oncology*, 16(11), 2274.

La Montagna M, et al. (2021) AMPK β loss promotes KRAS-mediated lung tumorigenesis. *Cell death and differentiation*, 28(9), 2673.

Zhang T, et al. (2019) Phosphorylation of TET2 by AMPK is indispensable in myogenic differentiation. *Epigenetics & chromatin*, 12(1), 32.

Wang Y, et al. (2018) AMP-activated protein kinase/myocardin-related transcription factor-A signaling regulates fibroblast activation and renal fibrosis. *Kidney international*, 93(1), 81.

Qian X, et al. (2018) Conversion of PRPS Hexamer to Monomer by AMPK-Mediated Phosphorylation Inhibits Nucleotide Synthesis in Response to Energy Stress. *Cancer discovery*, 8(1), 94.

Nagarajan A, et al. (2017) Paraoxonase 2 Facilitates Pancreatic Cancer Growth and Metastasis by Stimulating GLUT1-Mediated Glucose Transport. *Molecular cell*, 67(4), 685.

Farah BL, et al. (2016) Induction of autophagy improves hepatic lipid metabolism in glucose-6-phosphatase deficiency. *Journal of hepatology*, 64(2), 370.

Ruivo MTG, et al. (2016) Host AMPK Is a Modulator of Plasmodium Liver Infection. *Cell reports*, 16(10), 2539.

Wang W, et al. (2015) AMPK modulates Hippo pathway activity to regulate energy homeostasis. *Nature cell biology*, 17(4), 490.

Hu WT, et al. (2014) Transient folate deprivation in combination with small-molecule compounds facilitates the generation of somatic cell-derived pluripotent stem cells in mice. *Journal of Huazhong University of Science and Technology. Medical sciences = Hua zhong ke ji da xue xue bao. Yi xue Ying De wen ban = Huazhong keji daxue xuebao. Yixue Yingdewen ban*, 34(2), 151.

Cui Q, et al. (2013) Hepatocyte growth factor inhibits TGF- β 1-induced myofibroblast differentiation in tendon fibroblasts: role of AMPK signaling pathway. *The journal of physiological sciences : JPS*, 63(3), 163.