

# Resource Summary Report

Generated by [RRID](#) on Aug 19, 2026

## pAMPK alpha2 WT

RRID:Addgene\_15991

Type: Plasmid

### Proper Citation

RRID:Addgene\_15991

### Plasmid Information

**URL:** <http://www.addgene.org/15991>

**Proper Citation:** RRID:Addgene\_15991

**Insert Name:** AMPK alpha2

**Organism:** Rattus norvegicus

**Bacterial Resistance:** Ampicillin

**Defining Citation:** [PMID:11389854](#)

**Vector Backbone Description:** Backbone Marker:Invitrogen; Backbone Size:5400; Vector Backbone:pcDNA3; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

**Plasmid Name:** pAMPK alpha2 WT

**Record Creation Time:** 20220422T221905+0000

**Record Last Update:** 20260815T080835+0000

### Ratings and Alerts

No rating or validation information has been found for pAMPK alpha2 WT.

No alerts have been found for pAMPK alpha2 WT.

### 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 [RRID](#) .

Zhang L, et al. (2024) AMPK $\beta$ 2 regulates fasting-induced hyperketonemia by suppressing SCOT ubiquitination and degradation. *Scientific reports*, 14(1), 1713.

Park JM, et al. (2023) Redefining the role of AMPK in autophagy and the energy stress response. *Nature communications*, 14(1), 2994.

Karabiyik C, et al. (2021) Glucose starvation induces autophagy via ULK1-mediated activation of PIKfyve in an AMPK-dependent manner. *Developmental cell*, 56(13), 1961.

Kinsey CG, et al. (2019) Protective autophagy elicited by RAF $\rightarrow$ MEK $\rightarrow$ ERK inhibition suggests a treatment strategy for RAS-driven cancers. *Nature medicine*, 25(4), 620.

Wang S, et al. (2018) HSF1 deficiency accelerates the transition from pressure overload-induced cardiac hypertrophy to heart failure through endothelial miR-195a-3p-mediated impairment of cardiac angiogenesis. *Journal of molecular and cellular cardiology*, 118, 193.

Marinangeli C, et al. (2018) AMP-Activated Protein Kinase Is Essential for the Maintenance of Energy Levels during Synaptic Activation. *iScience*, 9, 1.

Sun X, et al. (2017) AMPK improves gut epithelial differentiation and barrier function via regulating Cdx2 expression. *Cell death and differentiation*, 24(5), 819.

Xue Y, et al. (2016) Metformin Improves Ileal Epithelial Barrier Function in Interleukin-10 Deficient Mice. *PloS one*, 11(12), e0168670.

Matsuda T, et al. (2015) Regulation of Pancreatic  $\beta$  Cell Mass by Cross-Interaction between CCAAT Enhancer Binding Protein  $\beta$  Induced by Endoplasmic Reticulum Stress and AMP-Activated Protein Kinase Activity. *PloS one*, 10(6), e0130757.

Samuel MA, et al. (2014) LKB1 and AMPK regulate synaptic remodeling in old age. *Nature neuroscience*, 17(9), 1190.

Singh PK, et al. (2012) The laforin-malin complex negatively regulates glycogen synthesis by modulating cellular glucose uptake via glucose transporters. *Molecular and cellular biology*, 32(3), 652.

Das AK, et al. (2012) AMP-activated protein kinase stimulates myostatin expression in C2C12 cells. *Biochemical and biophysical research communications*, 427(1), 36.

Zhao JX, et al. (2011) AMP-activated protein kinase regulates beta-catenin transcription via histone deacetylase 5. *The Journal of biological chemistry*, 286(18), 16426.

Kazgan N, et al. (2010) Identification of a nuclear export signal in the catalytic subunit of AMP-activated protein kinase. *Molecular biology of the cell*, 21(19), 3433.

Zhao J, et al. (2010) AMP-activated protein kinase (AMPK) cross-talks with canonical Wnt signaling via phosphorylation of beta-catenin at Ser 552. *Biochemical and biophysical research communications*, 395(1), 146.