

Resource Summary Report

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

pLKO.1-TSC2

RRID:Addgene_15478

Type: Plasmid

Proper Citation

RRID:Addgene_15478

Plasmid Information

URL: <http://www.addgene.org/15478>

Proper Citation: RRID:Addgene_15478

Insert Name: TSC2 shRNA

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:17277771](#)

Vector Backbone Description: Backbone Size:7000; Vector Backbone:pLKO.1; Vector Types:Mammalian Expression, Lentiviral, RNAi; Bacterial Resistance:Ampicillin

Comments: Target sequence for human TSC2 is 5'-CACTGGCCTTGGACGGTATTG-3'.

Plasmid Name: pLKO.1-TSC2

Record Creation Time: 20220422T221848+0000

Record Last Update: 20260725T074042+0000

Ratings and Alerts

No rating or validation information has been found for pLKO.1-TSC2.

No alerts have been found for pLKO.1-TSC2.

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](#) .

Hawsawi O, et al. (2025) Mitochondrial uncouplers inhibit oncogenic E2F1 activity and prostate cancer growth. *Cell reports. Medicine*, 6(1), 101890.

Fidalgo da Silva E, et al. (2023) Tuberin levels during cellular differentiation in brain development. *Differentiation; research in biological diversity*, 130, 43.

He B, et al. (2022) Chylomicron production is repressed by RPTOR knockdown, R-?-lipoic acid and 4-phenylbutyric acid in human enterocyte-like Caco-2 cells. *The Journal of nutritional biochemistry*, 108, 109087.

Kaur H, et al. (2021) Curcumin steers THP-1 cells under LPS and mTORC1 challenges toward phenotypically resting, low cytokine-producing macrophages. *The Journal of nutritional biochemistry*, 88, 108553.

He B, et al. (2020) R-?-Lipoic Acid and 4-Phenylbutyric Acid Have Distinct Hypolipidemic Mechanisms in Hepatic Cells. *Biomedicines*, 8(8).

Andrews MG, et al. (2020) mTOR signaling regulates the morphology and migration of outer radial glia in developing human cortex. *eLife*, 9.

Fuentes-Villalobos F, et al. (2019) DISC1 promotes translation maintenance during sodium arsenite-induced oxidative stress. *Biochimica et biophysica acta. Gene regulatory mechanisms*, 1862(6), 657.

Shi Q, et al. (2018) Nox4 is a Target for Tuberin Deficiency Syndrome. *Scientific reports*, 8(1), 3781.

Kaur H, et al. (2018) Piperine potentiates curcumin-mediated repression of mTORC1 signaling in human intestinal epithelial cells: implications for the inhibition of protein synthesis and TNF? signaling. *The Journal of nutritional biochemistry*, 57, 276.

Elgendy M, et al. (2017) Dual modulation of MCL-1 and mTOR determines the response to sunitinib. *The Journal of clinical investigation*, 127(1), 153.

Thiebold AL, et al. (2017) Mammalian target of rapamycin complex 1 activation sensitizes human glioma cells to hypoxia-induced cell death. *Brain : a journal of neurology*, 140(10), 2623.

Roberts JL, et al. (2016) Improvement of mTORC1-driven overproduction of apoB-containing triacylglyceride-rich lipoproteins by short-chain fatty acids, 4-phenylbutyric acid and (R)-?-lipoic acid, in human hepatocellular carcinoma cells. *Biochimica et biophysica acta*, 1861(3), 166.

Yang CS, et al. (2015) Fatty acid synthase inhibition engages a novel caspase-2 regulatory mechanism to induce ovarian cancer cell death. *Oncogene*, 34(25), 3264.

Kim EY, et al. (2014) Inhibition of mTORC1 induces loss of E-cadherin through AKT/GSK-3 β signaling-mediated upregulation of E-cadherin repressor complexes in non-small cell lung cancer cells. *Respiratory research*, 15(1), 26.

Munkley J, et al. (2014) A novel androgen-regulated isoform of the TSC2 tumour suppressor gene increases cell proliferation. *Oncotarget*, 5(1), 131.