

Resource Summary Report

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

pBabe-Kras G12D

RRID:Addgene_58902

Type: Plasmid

Proper Citation

RRID:Addgene_58902

Plasmid Information

URL: <http://www.addgene.org/58902>

Proper Citation: RRID:Addgene_58902

Insert Name: KRAS

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Vector Backbone Description: Backbone Marker:unknown; Backbone Size:5169; Vector Backbone:pBabe-puro; Vector Types:Mammalian Expression, Retroviral; Bacterial Resistance:Ampicillin

Plasmid Name: pBabe-Kras G12D

Relevant Mutation: G12D mutation

Record Creation Time: 20220422T222340+0000

Record Last Update: 20260815T081719+0000

Ratings and Alerts

No rating or validation information has been found for pBabe-Kras G12D.

No alerts have been found for pBabe-Kras G12D.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 27 mentions in open access literature.

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

Wang R, et al. (2026) Epithelial-dermal inflammasome crosstalk in cutaneous squamous cell carcinoma. *Molecular biology of the cell*, 37(3), br7.

Shin DH, et al. (2025) Targeting TGF- β -Smad2/3-JNK1-mediated SIRT1 activity overcomes the chemoresistance of KRAS mutation lung cancer. *Experimental & molecular medicine*, 57(9), 2022.

Mateo-Victoriano B, et al. (2025) Oncogenic KRAS addiction states differentially influence MTH1 expression and 8-oxodGTPase activity in lung adenocarcinoma. *Redox biology*, 82, 103610.

Kim SY, et al. (2025) Involvement of p38 MAPK and MAPKAPK2 in promoting cell death and the inflammatory response to ischemic stress associated with necrotic glioblastoma. *Cell death & disease*, 16(1), 12.

Tripathi BK, et al. (2024) The pro-oncogenic noncanonical activity of a RAS•GTP:RanGAP1 complex facilitates nuclear protein export. *Nature cancer*, 5(12), 1902.

Bartolacci C, et al. (2022) Targeting de novo lipogenesis and the Lands cycle induces ferroptosis in KRAS-mutant lung cancer. *Nature communications*, 13(1), 4327.

Masgras I, et al. (2022) Tumor growth of neurofibromin-deficient cells is driven by decreased respiration and hampered by NAD⁺ and SIRT3. *Cell death and differentiation*, 29(10), 1996.

Ramakrishnan G, et al. (2022) NF1 loss of function as an alternative initiating event in pancreatic ductal adenocarcinoma. *Cell reports*, 41(6), 111623.

Reggiardo RE, et al. (2022) Mutant KRAS regulates transposable element RNA and innate immunity via KRAB zinc-finger genes. *Cell reports*, 40(3), 111104.

Tripathi P, et al. (2022) Pixantrone confers radiosensitization in KRAS mutated cancer cells by suppression of radiation-induced prosurvival pathways. *Free radical biology & medicine*, 190, 351.

Merkle J, et al. (2021) CDKN2A-Mutated Pancreatic Ductal Organoids from Induced Pluripotent Stem Cells to Model a Cancer Predisposition Syndrome. *Cancers*, 13(20).

Breunig M, et al. (2021) Modeling plasticity and dysplasia of pancreatic ductal organoids derived from human pluripotent stem cells. *Cell stem cell*, 28(6), 1105.

Li R, et al. (2021) Therapeutically reprogrammed nutrient signalling enhances nanoparticulate albumin bound drug uptake and efficacy in KRAS-mutant cancer. *Nature nanotechnology*, 16(7), 830.

Griesmann H, et al. (2021) CUX1 Enhances Pancreatic Cancer Formation by Synergizing with KRAS and Inducing MEK/ERK-Dependent Proliferation. *Cancers*, 13(10).

Yang HJ, et al. (2020) Establishment and Characterization of Immortalized Miniature Pig Pancreatic Cell Lines Expressing Oncogenic K-RasG12D. *International journal of molecular sciences*, 21(22).

Tsang T, et al. (2020) Copper is an essential regulator of the autophagic kinases ULK1/2 to drive lung adenocarcinoma. *Nature cell biology*, 22(4), 412.

Dai E, et al. (2020) Autophagy-dependent ferroptosis drives tumor-associated macrophage polarization via release and uptake of oncogenic KRAS protein. *Autophagy*, 16(11), 2069.

Dost AFM, et al. (2020) Organoids Model Transcriptional Hallmarks of Oncogenic KRAS Activation in Lung Epithelial Progenitor Cells. *Cell stem cell*, 27(4), 663.

Inoue S, et al. (2019) Uterine adenomyosis is an oligoclonal disorder associated with KRAS mutations. *Nature communications*, 10(1), 5785.

Kalvala A, et al. (2019) Phenotypic Switching of Naïve T Cells to Immune-Suppressive Treg-Like Cells by Mutant KRAS. *Journal of clinical medicine*, 8(10).