

Resource Summary Report

Generated by [NIF](#) on Aug 11, 2026

B6.129-Kras^{tm4Tyj}/Nci

RRID:IMSR_NCIMR:01XJ6

Type: Organism

Proper Citation

RRID:IMSR_NCIMR:01XJ6

Organism Information

URL:

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Description: Mus musculus with name B6.129-Kras^{tm4Tyj}/Nci from IMSR.

Species: Mus musculus

Notes: gene symbol note: Kirsten rat sarcoma viral oncogene homolog; congenic strain: Kras

Affected Gene: Kirsten rat sarcoma viral oncogene homolog

Genomic Alteration: targeted mutation 4; Tyler Jacks

Catalog Number: NCIMR:01XJ6

Database: National Cancer Institute at Frederick

Database Abbreviation: NCIMR

Availability: embryo

Organism Name: B6.129-Kras^{tm4Tyj}/Nci

Record Creation Time: 20250513T061851+0000

Record Last Update: 20260808T055313+0000

Ratings and Alerts

No rating or validation information has been found for B6.129-Kras^{tm4Tyj}/Nci.

Warning: Warning. Researchers have noted that this genotype does not sufficiently model human acute myeloid leukemia.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: National Cancer Institute at Frederick

Usage and Citation Metrics

We found 15 mentions in open access literature.

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

Yang MH, et al. (2026) The impact of K-Ras Gly12 mutants on homeostasis and tumorigenesis in the colonic epithelium. *Oncogene*, 45(19), 1828.

Ganguly K, et al. (2022) Mucin 5AC-Mediated CD44/ITGB1 Clustering Mobilizes Adipose-Derived Mesenchymal Stem Cells to Modulate Pancreatic Cancer Stromal Heterogeneity. *Gastroenterology*, 162(7), 2032.

Betzler AM, et al. (2021) Differential Effects of Trp53 Alterations in Murine Colorectal Cancer. *Cancers*, 13(4).

Alam H, et al. (2020) KMT2D Deficiency Impairs Super-Enhancers to Confer a Glycolytic Vulnerability in Lung Cancer. *Cancer cell*, 37(4), 599.

Mallya K, et al. (2020) Acinar transformed ductal cells exhibit differential mucin expression in a tamoxifen-induced pancreatic ductal adenocarcinoma mouse model. *Biology open*, 9(9).

Johnson CW, et al. (2019) Isoform-Specific Destabilization of the Active Site Reveals a Molecular Mechanism of Intrinsic Activation of KRas G13D. *Cell reports*, 28(6), 1538.

Chua CW, et al. (2018) Differential requirements of androgen receptor in luminal progenitors during prostate regeneration and tumor initiation. *eLife*, 7.

Sullivan WJ, et al. (2018) Extracellular Matrix Remodeling Regulates Glucose Metabolism through TXNIP Destabilization. *Cell*, 175(1), 117.

Coelho MA, et al. (2017) Oncogenic RAS Signaling Promotes Tumor Immuno-resistance by Stabilizing PD-L1 mRNA. *Immunity*, 47(6), 1083.

Hong X, et al. (2016) Challenges in detecting pre-malignant pancreatic lesions during acute pancreatitis using a serum microRNA assay: a study based on KrasG12D transgenic mice. *Oncotarget*, 7(16), 22700.

Zhu L, et al. (2016) Multi-organ Mapping of Cancer Risk. *Cell*, 166(5), 1132.

Rachagani S, et al. (2015) Changes in microRNA (miRNA) expression during pancreatic cancer development and progression in a genetically engineered KrasG12D;Pdx1-Cre mouse (KC) model. *Oncotarget*, 6(37), 40295.

Dey P, et al. (2014) PD2/Paf1 depletion in pancreatic acinar cells promotes acinar-to-ductal metaplasia. *Oncotarget*, 5(12), 4480.

Chua CW, et al. (2014) Single luminal epithelial progenitors can generate prostate organoids in culture. *Nature cell biology*, 16(10), 951.

Rachagani S, et al. (2012) Mucin (Muc) expression during pancreatic cancer progression in spontaneous mouse model: potential implications for diagnosis and therapy. *Journal of hematology & oncology*, 5, 68.