

Resource Summary Report

Generated by [SPARC SAWG](#) on Sep 4, 2026

Onco-pig

RRID:NSRRC_0033

Type: Organism

Proper Citation

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Organism Information

URL: <https://nsrrc.missouri.edu/StrainAvail/>

Proper Citation: RRID:NSRRC_0033

Description: Application: Inducible Cancer Model

Species: Sus scrofa

Notes: Application: Inducible Cancer Model

Phenotype: induced expression of mutant KRAS and p53

Affected Gene: KRASG12D and p53R172H

Genomic Alteration: Transgene: CAG LoxP Stop driving KRASG12D and p53R172H

Catalog Number: 33

Background: Minnesota Mini

Database: NSRRC, National Swine Resource and Research Center (NSRRC)

Database Abbreviation: NSRRC

Source References: [PMID:26132737](https://pubmed.ncbi.nlm.nih.gov/26132737/)

Organism Name: Onco-pig

Record Creation Time: 20230226T235432+0000

Record Last Update: 20260829T225921+0000

Ratings and Alerts

No rating or validation information has been found for Onco-pig.

No alerts have been found for Onco-pig.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: NSRRC, National Swine Resource and Research Center (NSRRC)

Usage and Citation Metrics

We found 28 mentions in open access literature.

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

Arneson-Wissink PC, et al. (2026) Interleukin 6 Drives Durable T Cell-Mediated Immunity to Pancreatic Cancer. Cellular and molecular gastroenterology and hepatology, 20(7), 101768.

Ahn JH, et al. (2026) Monocyte Preprogramming by Tobacco Carcinogens and Fructose Intake Accelerates Lung Cancer Progression via Metabolic and Epigenetic Pathways. International journal of biological sciences, 22(7), 3788.

Aney KJ, et al. (2026) Novel Acinar Metaplastic States Uncovered in Exocrine Pancreas Disease. Cellular and molecular gastroenterology and hepatology, 20(5), 101717.

Fernandes LM, et al. (2025) A single-cell atlas of normal and KRASG12D-malformed lymphatic vessels. JCI insight, 10(5).

Sun Y, et al. (2025) ARP2/3 complex affects myofibroblast differentiation and migration in pancreatic ductal adenocarcinoma. International journal of cancer, 156(6), 1272.

Ugras J, et al. (2025) Aspartate Transaminases Are Dispensable for Pancreatic Development and Pancreatic Cancer Progression. bioRxiv : the preprint server for biology.

Wang H, et al. (2025) Lung commensal bacteria promote lung cancer progression through NK cell-mediated immunosuppressive microenvironment. International journal of medical sciences, 22(5), 1039.

Wang H, et al. (2025) FTO-mediated m6A demethylation regulates IGFBP3 expression and AKT activation through IMP3-dependent P-body re-localisation in lung cancer. Clinical and translational medicine, 15(7), e70392.

Hagbi-Levi S, et al. (2025) Identification of Dinaciclib and Ganetespib as anti-inflammatory drugs using a novel HTP screening assay that targets IFN γ -dependent PD-L1. Frontiers in immunology, 16, 1502094.

Cong B, et al. (2025) Colon cancer cells evade drug action by enhancing drug metabolism. Oncogene, 44(36), 3284.

Lao M, et al. (2025) Lipid metabolism reprogramming by SREBP1-PCSK9 targeting sensitizes pancreatic cancer to immunochemotherapy. *Cancer communications (London, England)*, 45(8), 1010.

Kim EQ, et al. (2025) Methodology of murine lung cancer mimics clinical lung adenocarcinoma progression and metastasis. *Scientific reports*, 15(1), 7127.

Widnicka-Siergiejko A, et al. (2025) Inflammatory Stimuli and Fecal Microbiota Transplantation Accelerate Pancreatic Carcinogenesis in Transgenic Mice, Accompanied by Changes in the Microbiota Composition. *Cells*, 14(5).

Kustiati U, et al. (2025) Lung cancer: Animal model of lung cancer, molecular carcinogenesis of lung cancer, and antitumor effect of *Ocimum sanctum* against lung cancer. *Open veterinary journal*, 15(2), 482.

Munyurangabo G, et al. (2025) Co-operative epigenetic remodelling by Setd2 deficiency and Kras mutation drives juvenile myelomonocytic leukaemia development and MEK inhibitor sensitivity. *British journal of haematology*, 207(4), 1289.

Tanaka Y, et al. (2025) Ribosome biogenesis as a potential therapeutic target in KRAS mutant colorectal cancer. *Nature communications*, 17(1), 1224.

Jeong H, et al. (2025) ULK1 knockout suppresses pancreatic cancer progression by inhibiting autophagy and enhancing antitumor immunity. *Experimental & molecular medicine*, 57(12), 2816.

Zhai H, et al. (2024) Unveiling the STAT3-ACC1 axis: a key driver of lipid metabolism and tumor progression in non-small cell lung cancer. *Journal of Cancer*, 15(8), 2340.

Arneson-Wissink PC, et al. (2024) Pancreatic cancer cells overexpressing interleukin 6 induce T-cell-mediated tumor clearance and durable anti-tumor immune response. *bioRxiv : the preprint server for biology*.

Zhang M, et al. (2024) KLK10/LIPH/PARD6B/SLC52A3 are promising molecular biomarkers for the prognosis of pancreatic cancer through a ceRNA network. *Heliyon*, 10(1), e24287.