

Resource Summary Report

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

KK.Cg-A^y/J

RRID:IMSR_JAX:002468

Type: Organism

Proper Citation

RRID:IMSR_JAX:002468

Organism Information

URL: <https://www.jax.org/strain/002468>

Proper Citation: RRID:IMSR_JAX:002468

Description: Mus musculus with name KK.Cg-A^y/J from IMSR.

Species: Mus musculus

Synonyms: KK-Ay. KKAy

Notes: gene symbol note: nonagouti; congenic strain: a

Affected Gene: nonagouti

Genomic Alteration: agouti yellow

Catalog Number: JAX:002468

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: KK.Cg-A^y/J

Record Creation Time: 20250513T053632+0000

Record Last Update: 20260725T044340+0000

Ratings and Alerts

No rating or validation information has been found for KK.Cg-A^y/J.

No alerts have been found for KK.Cg-A^y/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 19 mentions in open access literature.

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

Ren W, et al. (2025) A tandem repeat atlas for the genome of inbred mouse strains: A genetic variation resource. *iScience*, 28(11), 113703.

MacIver B, et al. (2023) A Spectrum of Age- and Gender-Dependent Lower Urinary Tract Phenotypes in Three Mouse Models of Type 2 Diabetes. *Metabolites*, 13(6).

Zhang L, et al. (2023) Empagliflozin ameliorates diabetic cardiomyopathy via regulated branched-chain amino acid metabolism and mTOR/p-ULK1 signaling pathway-mediated autophagy. *Diabetology & metabolic syndrome*, 15(1), 93.

Estefanía González-Alvarez M, et al. (2022) PFOA-Induced Ovotoxicity Differs Between Lean and Obese Mice With Impacts on Ovarian Reproductive and DNA Damage Sensing and Repair Proteins. *Toxicological sciences : an official journal of the Society of Toxicology*, 190(2), 173.

Zhou J, et al. (2022) Ketogenic diet ameliorates lipid dysregulation in type 2 diabetic mice by downregulating hepatic pescadillo 1. *Molecular medicine (Cambridge, Mass.)*, 28(1), 1.

Gunasekar SK, et al. (2022) Small molecule SWELL1 complex induction improves glycemic control and nonalcoholic fatty liver disease in murine Type 2 diabetes. *Nature communications*, 13(1), 784.

Kasza I, et al. (2022) Contrasting recruitment of skin-associated adipose depots during cold challenge of mouse and human. *The Journal of physiology*, 600(4), 847.

Casey R, et al. (2021) Discovery through Machine Learning and Preclinical Validation of Novel Anti-Diabetic Peptides. *Biomedicines*, 9(3).

Xu L, et al. (2021) Empagliflozin Induces White Adipocyte Browning and Modulates Mitochondrial Dynamics in KK Cg-Ay/J Mice and Mouse Adipocytes. *Frontiers in physiology*, 12, 745058.

Chen YT, et al. (2020) NT5C2 methylation regulatory interplay between DNMT1 and insulin receptor in type 2 diabetes. *Scientific reports*, 10(1), 16087.

Wagner JG, et al. (2020) Repetitive Ozone Exposures and Evaluation of Pulmonary Inflammation and Remodeling in Diabetic Mouse Strains. *Environmental health perspectives*, 128(11), 117009.

Cheng Y, et al. (2019) Pancreatic kallikrein protects against diabetic retinopathy in KK Cg-Ay/J and high-fat diet/streptozotocin-induced mouse models of type 2 diabetes. *Diabetologia*, 62(6), 1074.

Chen YT, et al. (2016) Inhibition of DNA methyltransferase 1 increases nuclear receptor subfamily 4 group A member 1 expression and decreases blood glucose in type 2 diabetes. *Oncotarget*, 7(26), 39162.

Reifsnyder PC, et al. (2016) Rapamycin treatment benefits glucose metabolism in mouse models of type 2 diabetes. *Aging*, 8(11), 3120.

Nash EE, et al. (2016) A Murine Model of *Candida glabrata* Vaginitis Shows No Evidence of an Inflammatory Immunopathogenic Response. *PloS one*, 11(1), e0147969.

Chen YT, et al. (2015) PTPRD silencing by DNA hypermethylation decreases insulin receptor signaling and leads to type 2 diabetes. *Oncotarget*, 6(15), 12997.

Bravo-Nuevo A, et al. (2014) Meglumine exerts protective effects against features of metabolic syndrome and type II diabetes. *PloS one*, 9(2), e90031.

Zhang J, et al. (2013) A tripeptide Diapin effectively lowers blood glucose levels in male type 2 diabetes mice by increasing blood levels of insulin and GLP-1. *PloS one*, 8(12), e83509.

O'Brien SP, et al. (2013) Glomerulopathy in the KK.Cg-A(y) /J mouse reflects the pathology of diabetic nephropathy. *Journal of diabetes research*, 2013, 498925.