

Resource Summary Report

Generated by [NIF](#) on Sep 10, 2026

AKR/J

RRID:IMSR_JAX:000648

Type: Organism

Proper Citation

RRID:IMSR_JAX:000648

Organism Information

URL: <https://www.jax.org/strain/000648>

Proper Citation: RRID:IMSR_JAX:000648

Description: Mus musculus with name AKR/J from IMSR.

Species: Mus musculus

Synonyms: Soat1. AK

Notes: gene symbol note: aryl-hydrocarbon receptor|hemoglobin beta chain complex|latent transforming growth factor beta binding protein 4|sterol O-acyltransferase 1|beta-2 microglobulin|interleukin 3 receptor; alpha chain|obesity QTL 4|TYRO3 protein tyrosine kinase 3|MX dynamin-like GTPase 1|obesity QTL 3|CD5 antigen|hemolytic complement|cytochrome c oxidase subunit 7A2 like|cadherin related 23 (otocadherin)|8-oxoguanine DNA-glycosylase 1|resistance to MCF virus; inbred strain: Ahr|Hbb|Ltbp4|Soat1|B2m|Il3ra|Obq4|Tyro3|Mx1|Obq3|Cd5|Hc|Cox7a2l|Cdh23|Ogg1|Rmcf

Affected Gene: aryl-hydrocarbon receptor|hemoglobin beta chain complex|latent transforming growth factor beta binding protein 4|sterol O-acyltransferase 1|beta-2 microglobulin|interleukin 3 receptor; alpha chain|obesity QTL 4|TYRO3 protein tyrosine kinase 3|MX dynamin-like GTPase 1|obesity QTL 3|CD5 antigen|hemolytic complement|cytochrome c oxidase subunit 7A2 like|cadherin related 23 (otocadherin)|8-oxoguanine DNA-glycosylase 1|resistance to MCF virus

Genomic Alteration: d variant|d|Duchenne modifier 1 susceptible|adrenocortical lipid depletion|a variant|mutation 1|AKR/J|myxovirus susceptibility 1|b variant|deficient|long|age related hearing loss 1|MCF sensitive

Catalog Number: JAX:000648

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: AKR/J

Record Creation Time: 20250513T053620+0000

Record Last Update: 20260905T044357+0000

Ratings and Alerts

No rating or validation information has been found for AKR/J.

No alerts have been found for AKR/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 200 mentions in open access literature.

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

Lteif C, et al. (2026) The role of Id genes on pulmonary hypertension development in left heart failure. American heart journal plus : cardiology research and practice, 61, 100692.

Inzerillo PC, et al. (2026) Strain-Dependent Protective Innate Immunity Against Pneumocystis Pneumonia in Mice. Journal of fungi (Basel, Switzerland), 12(4).

Cha PC, et al. (2025) Integrative single-cell RNA and ATAC sequencing reveals the impact of chronic cigarette smoking on lung epithelial responses to influenza and hyperoxia. Respiratory research, 27(1), 13.

Wang R, et al. (2025) Human placenta mesenchymal stromal cells alleviate intestinal inflammation and repair intestinal barrier function by activating AMPK-FXR pathway. Communications biology, 8(1), 830.

Berlin P, et al. (2025) Perioperative anti- α 4 β 7 Integrin Blockade Alters Wound Cell Infiltrate but Not the Functional Outcome of Ileocecal Anastomoses in Mice With Crohn's-like Ileitis. Inflammatory bowel diseases, 31(12), 3385.

Ross CR, et al. (2025) Genetic background and oncogenic driver determines the genomic evolution and transcriptomics of mammary tumor metastasis. Communications biology, 8(1), 1224.

Guerra LA, et al. (2025) Genetic variation in RYR1 is associated with heart failure progression and mortality in a diverse patient population. *Frontiers in cardiovascular medicine*, 12, 1529114.

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

Bauer-Rowe KE, et al. (2025) Creeping fat-derived mechanosensitive fibroblasts drive intestinal fibrosis in Crohn's disease strictures. *Cell*.

Benjamin KJ, et al. (2024) Cell type-specific expression of angiotensin receptors in the human lung with implications for health, aging, and chronic disease. *bioRxiv : the preprint server for biology*.

Verdugo-Sivianes EM, et al. (2024) MEG8 as an antagonistic pleiotropic mechanism in breast cancer. *Cell death discovery*, 10(1), 509.

Liu C, et al. (2024) Short-chain fatty acids enhance muscle mass and function through the activation of mTOR signalling pathways in sarcopenic mice. *Journal of cachexia, sarcopenia and muscle*, 15(6), 2387.

Ward GA, et al. (2024) Epigenetic Priming by Hypomethylation Enhances the Immunogenic Potential of Tolinapant in T-cell Lymphoma. *Cancer research communications*, 4(6), 1441.

Choi J, et al. (2024) ARNT2 controls prefrontal somatostatin interneurons mediating affective empathy. *Cell reports*, 43(9), 114659.

Baschant U, et al. (2024) Effects of dietary iron deficiency or overload on bone: Dietary details matter. *Bone*, 184, 117092.

Lulek CF, et al. (2023) Sex differences in acute delta-9-tetrahydrocannabinol (Δ^9 -THC) response and tolerance as a function of mouse strain. *Psychopharmacology*, 240(9), 1987.

Durán A, et al. (2023) A Mouse Systems Genetics Approach Reveals Common and Uncommon Genetic Modifiers of Hepatic Lysosomal Enzyme Activities and Glycosphingolipids. *International journal of molecular sciences*, 24(5).

Sikora M, et al. (2023) MiR-21-5p regulates the dynamic of mitochondria network and rejuvenates the senile phenotype of bone marrow stromal cells (BMSCs) isolated from osteoporotic SAM/P6 mice. *Stem cell research & therapy*, 14(1), 54.

Andreeva TV, et al. (2023) An Analysis of Genetic Predisposition to Hereditary Catalepsy in a Mouse Model of Neuropsychiatric Disorders Using Whole-Genome Sequencing Data. *Acta naturae*, 15(1), 26.

Metwaly A, et al. (2023) Diet prevents the expansion of segmented filamentous bacteria and ileo-colonic inflammation in a model of Crohn's disease. *Microbiome*, 11(1), 66.