

Resource Summary Report

Generated by [kravitz2](#) on Sep 19, 2026

B6.129S2-Aire^{tm1.1Doi}/J

RRID:IMSR_JAX:004743

Type: Organism

Proper Citation

RRID:IMSR_JAX:004743

Organism Information

URL: <https://www.jax.org/strain/004743>

Proper Citation: RRID:IMSR_JAX:004743

Description: Mus musculus with name B6.129S2-Aire^{tm1.1Doi}/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: autoimmune regulator; mutant strain: Aire

Affected Gene: autoimmune regulator

Genomic Alteration: targeted mutation 1.1; Christophe Benoist and Diane Mathis

Catalog Number: JAX:004743

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: embryo

Organism Name: B6.129S2-Aire^{tm1.1Doi}/J

Record Creation Time: 20250513T053646+0000

Record Last Update: 20260919T054835+0000

Ratings and Alerts

No rating or validation information has been found for B6.129S2-Aire^{tm1.1Doi}/J.

No alerts have been found for B6.129S2-Aire^{tm1.1Doi}/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 16 mentions in open access literature.

Listed below are recent publications. The full list is available at [kravitz2](#) .

Ferreirinha P, et al. (2026) KLF2 controls thymic epithelial cell homeostasis, impacting regulatory T cell development and immune tolerance. *iScience*, 29(4), 115161.

Ushio A, et al. (2024) Functionally diverse thymic medullary epithelial cells interplay to direct central tolerance. *Cell reports*, 43(4), 114072.

Almaghrabi S, et al. (2023) Characterisation of APS-1 Experimental Models Is Crucial for Development of Novel Therapies. *BioMed research international*, 2023, 7960443.

Klawon DEJ, et al. (2021) Altered selection on a single self-ligand promotes susceptibility to organ-specific T cell infiltration. *The Journal of experimental medicine*, 218(6).

Dikiy S, et al. (2021) A distal Foxp3 enhancer enables interleukin-2 dependent thymic Treg cell lineage commitment for robust immune tolerance. *Immunity*, 54(5), 931.

Watanabe M, et al. (2020) B7-CD28 co-stimulation modulates central tolerance via thymic clonal deletion and Treg generation through distinct mechanisms. *Nature communications*, 11(1), 6264.

Vobořil M, et al. (2020) Toll-like receptor signaling in thymic epithelium controls monocyte-derived dendritic cell recruitment and Treg generation. *Nature communications*, 11(1), 2361.

Lebel MÈ, et al. (2020) Differential expression of tissue-restricted antigens among mTEC is associated with distinct autoreactive T cell fates. *Nature communications*, 11(1), 3734.

Guyon C, et al. (2020) Aire-dependent genes undergo Clp1-mediated 3'UTR shortening associated with higher transcript stability in the thymus. *eLife*, 9.

Zhang J, et al. (2019) Th1 Biased Progressive Autoimmunity in Aged Aire-Deficient Mice Accelerated Thymic Epithelial Cell Senescence. *Aging and disease*, 10(3), 497.

Kalra R, et al. (2018) AIRE promotes androgen-independent prostate cancer by directly regulating IL-6 and modulating tumor microenvironment. *Oncogenesis*, 7(5), 43.

Wang H, et al. (2018) CCR7 defines a precursor for murine iNKT cells in thymus and periphery. *eLife*, 7.

Gu B, et al. (2017) AIRE is a critical spindle-associated protein in embryonic stem cells. *eLife*, 6.

Leonard JD, et al. (2017) Identification of Natural Regulatory T Cell Epitopes Reveals Convergence on a Dominant Autoantigen. *Immunity*, 47(1), 107.

Chen J, et al. (2013) Comparative analysis of induced vs. spontaneous models of autoimmune uveitis targeting the interphotoreceptor retinoid binding protein. *PloS one*, 8(8), e72161.

Wu G, et al. (2012) DNA methylation profile of Aire-deficient mouse medullary thymic epithelial cells. *BMC immunology*, 13, 58.