

Resource Summary Report

Generated by ASWG on Aug 12, 2026

B6.129-Ahr^{tm1Bra}/J

RRID:IMSR_JAX:002831

Type: Organism

Proper Citation

RRID:IMSR_JAX:002831

Organism Information

URL: <https://www.jax.org/strain/002831>

Proper Citation: RRID:IMSR_JAX:002831

Description: Mus musculus with name B6.129-Ahr^{tm1Bra}/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: aryl-hydrocarbon receptor; mutant strain|congenic strain: Ahr

Affected Gene: aryl-hydrocarbon receptor

Genomic Alteration: targeted mutation 1; Christopher A Bradfield

Catalog Number: JAX:002831

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: B6.129-Ahr^{tm1Bra}/J

Record Creation Time: 20250513T053635+0000

Record Last Update: 20260808T050836+0000

Ratings and Alerts

No rating or validation information has been found for B6.129-Ahr^{tm1Bra}/J.

No alerts have been found for B6.129-Ahr^{tm1Bra}/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 31 mentions in open access literature.

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

Dean JW, et al. (2023) The aryl hydrocarbon receptor cell intrinsically promotes resident memory CD8+ T cell differentiation and function. *Cell reports*, 42(1), 111963.

Maradana MR, et al. (2023) Dietary environmental factors shape the immune defense against *Cryptosporidium* infection. *Cell host & microbe*, 31(12), 2038.

Nacarino-Palma A, et al. (2021) The aryl hydrocarbon receptor promotes differentiation during mouse preimplantational embryo development. *Stem cell reports*, 16(9), 2351.

Shin JH, et al. (2021) AHR Regulates NK Cell Migration via ASB2-Mediated Ubiquitination of Filamin A. *Frontiers in immunology*, 12, 624284.

Kumar A, et al. (2021) High-fat diet-induced upregulation of exosomal phosphatidylcholine contributes to insulin resistance. *Nature communications*, 12(1), 213.

Wei GZ, et al. (2021) Tryptophan-metabolizing gut microbes regulate adult neurogenesis via the aryl hydrocarbon receptor. *Proceedings of the National Academy of Sciences of the United States of America*, 118(27).

Kyoreva M, et al. (2021) CYP1A1 Enzymatic Activity Influences Skin Inflammation Via Regulation of the AHR Pathway. *The Journal of investigative dermatology*, 141(6), 1553.

Ishihara Y, et al. (2021) Aryl Hydrocarbon Receptor Signaling Synergizes with TLR/NF- κ B-Signaling for Induction of IL-22 Through Canonical and Non-Canonical AhR Pathways. *Frontiers in toxicology*, 3, 787360.

Schanz O, et al. (2020) Dietary AhR Ligands Regulate AhRR Expression in Intestinal Immune Cells and Intestinal Microbiota Composition. *International journal of molecular sciences*, 21(9).

de Araújo EF, et al. (2020) Pulmonary paracoccidioidomycosis in AhR deficient hosts is severe and associated with defective Treg and Th22 responses. *Scientific reports*, 10(1), 11312.

Zhang H, et al. (2020) An IL-27-Driven Transcriptional Network Identifies Regulators of IL-10 Expression across T Helper Cell Subsets. *Cell reports*, 33(8), 108433.

Rosser EC, et al. (2020) Microbiota-Derived Metabolites Suppress Arthritis by Amplifying Aryl-Hydrocarbon Receptor Activation in Regulatory B Cells. *Cell metabolism*, 31(4), 837.

Jackson EN, et al. (2019) Effects of Aryl Hydrocarbon Receptor Deficiency on PCB-77-Induced Impairment of Glucose Homeostasis during Weight Loss in Male and Female Obese Mice. *Environmental health perspectives*, 127(7), 77004.

Singh R, et al. (2019) Enhancement of the gut barrier integrity by a microbial metabolite through the Nrf2 pathway. *Nature communications*, 10(1), 89.

Borghi M, et al. (2019) Targeting the Aryl Hydrocarbon Receptor With Indole-3-Aldehyde Protects From Vulvovaginal Candidiasis via the IL-22-IL-18 Cross-Talk. *Frontiers in immunology*, 10, 2364.

Biagioli M, et al. (2019) The Aryl Hydrocarbon Receptor (AhR) Mediates the Counter-Regulatory Effects of Pelargonidins in Models of Inflammation and Metabolic Dysfunctions. *Nutrients*, 11(8).

Piper CJM, et al. (2019) Aryl Hydrocarbon Receptor Contributes to the Transcriptional Program of IL-10-Producing Regulatory B Cells. *Cell reports*, 29(7), 1878.

Kimura A, et al. (2018) NQO1 inhibits the TLR-dependent production of selective cytokines by promoting I κ B- γ degradation. *The Journal of experimental medicine*, 215(8), 2197.

Talbot J, et al. (2018) Smoking-induced aggravation of experimental arthritis is dependent of aryl hydrocarbon receptor activation in Th17 cells. *Arthritis research & therapy*, 20(1), 119.

Metidji A, et al. (2018) The Environmental Sensor AHR Protects from Inflammatory Damage by Maintaining Intestinal Stem Cell Homeostasis and Barrier Integrity. *Immunity*, 49(2), 353.