

Resource Summary Report

Generated by [PRECISE-TBI](#) on Aug 1, 2026

B6.129S6(Cg)-Spp1^{tm1Blh}/J

RRID:IMSR_JAX:004936

Type: Organism

Proper Citation

RRID:IMSR_JAX:004936

Organism Information

URL: <https://www.jax.org/strain/004936>

Proper Citation: RRID:IMSR_JAX:004936

Description: Mus musculus with name B6.129S6(Cg)-Spp1^{tm1Blh}/J from IMSR.

Species: Mus musculus

Synonyms: B6.Cg-Spp1/J

Notes: gene symbol note: secreted phosphoprotein 1; mutant strain|congenic strain: Spp1

Affected Gene: secreted phosphoprotein 1

Genomic Alteration: targeted mutation 1; Brigid L Hogan

Catalog Number: JAX:004936

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: B6.129S6(Cg)-Spp1^{tm1Blh}/J

Record Creation Time: 20250513T053647+0000

Record Last Update: 20260801T050349+0000

Ratings and Alerts

No rating or validation information has been found for B6.129S6(Cg)-Spp1^{tm1Blh}/J.

No alerts have been found for B6.129S6(Cg)-Spp1^{tm1Blh}/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 25 mentions in open access literature.

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

Moraitis I, et al. (2025) Mucosal Macrophages Govern Intestinal Regeneration in Response to Injury. *Gastroenterology*, 169(1), 119.

Trehan R, et al. (2025) SPP1 + macrophages cause exhaustion of tumor-specific T cells in liver metastases. *Nature communications*, 16(1), 4242.

Bourayou E, et al. (2024) Bone marrow monocytes sustain NK cell-poiesis during non-alcoholic steatohepatitis. *Cell reports*, 43(1), 113676.

Lawrence AR, et al. (2024) Microglia maintain structural integrity during fetal brain morphogenesis. *Cell*, 187(4), 962.

Sulsenti R, et al. (2024) Intracellular Osteopontin Promotes the Release of TNF α by Mast Cells to Restrain Neuroendocrine Prostate Cancer. *Cancer immunology research*, 12(9), 1147.

Li S, et al. (2023) Vitamin C protects retinal ganglion cells via SPP1 in glaucoma and after optic nerve damage. *Life science alliance*, 6(8).

De Schepper S, et al. (2023) Perivascular cells induce microglial phagocytic states and synaptic engulfment via SPP1 in mouse models of Alzheimer's disease. *Nature neuroscience*, 26(3), 406.

Sawaki D, et al. (2023) Osteopontin promotes age-related adipose tissue remodeling through senescence-associated macrophage dysfunction. *JCI insight*, 8(8).

Li S, et al. (2022) Secreted phosphoprotein 1 slows neurodegeneration and rescues visual function in mouse models of aging and glaucoma. *Cell reports*, 41(13), 111880.

Chen J, et al. (2022) Osteopontin Exacerbates High-Fat Diet-Induced Metabolic Disorders in a Microbiome-Dependent Manner. *mBio*, 13(6), e0253122.

Khamissi FZ, et al. (2022) Identification of kidney injury released circulating osteopontin as causal agent of respiratory failure. *Science advances*, 8(8), eabm5900.

Alves GF, et al. (2022) ICOS-Fc as innovative immunomodulatory approach to counteract inflammation and organ injury in sepsis. *Frontiers in immunology*, 13, 992614.

Rizzello C, et al. (2022) Intracellular osteopontin protects from autoimmunity-driven lymphoma development inhibiting TLR9-MYD88-STAT3 signaling. *Molecular cancer*, 21(1), 215.

Raineri D, et al. (2021) Inducible T-Cell Costimulator Ligand Plays a Dual Role in Melanoma Metastasis upon Binding to Osteopontin or Inducible T-Cell Costimulator. *Biomedicines*, 10(1).

Depalle B, et al. (2021) Osteopontin regulates type I collagen fibril formation in bone tissue. *Acta biomaterialia*, 120, 194.

Shi L, et al. (2021) Treg cell-derived osteopontin promotes microglia-mediated white matter repair after ischemic stroke. *Immunity*, 54(7), 1527.

Raineri D, et al. (2020) Osteopontin binds ICOSL promoting tumor metastasis. *Communications biology*, 3(1), 615.

Wei Q, et al. (2020) Snai2 Maintains Bone Marrow Niche Cells by Repressing Osteopontin Expression. *Developmental cell*, 53(5), 503.

Chang J, et al. (2019) Chemotherapy-generated cell debris stimulates colon carcinoma tumor growth via osteopontin. *FASEB journal : official publication of the Federation of American Societies for Experimental Biology*, 33(1), 114.

Ruzafa N, et al. (2018) The Retina of Osteopontin deficient Mice in Aging. *Molecular neurobiology*, 55(1), 213.