

Resource Summary Report

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STOCK Spaca3^{tm1Osb}/M6F

RRID:IMSR_CARD:2148

Type: Organism

Proper Citation

RRID:IMSR_CARD:2148

Organism Information

URL: <https://cardmice.com/rbase/strain?strainid=2148>

Proper Citation: RRID:IMSR_CARD:2148

Description: Mus musculus with name STOCK Spaca3^{tm1Osb}/M6F from IMSR.

Species: Mus musculus

Notes: gene symbol note: sperm acrosome associated 3; mutant stock: Spaca3

Affected Gene: sperm acrosome associated 3

Genomic Alteration: targeted mutation 1; Research Institute for Microbial Diseases; Osaka University

Catalog Number: CARD:2148

Database: Center for Animal Resources and Development

Database Abbreviation: CARD

Availability: embryo

Organism Name: STOCK Spaca3^{tm1Osb}/M6F

Record Creation Time: 20250513T061401+0000

Record Last Update: 20260829T053426+0000

Ratings and Alerts

No rating or validation information has been found for STOCK Spaca3^{tm1Osb}/M6F.

No alerts have been found for STOCK Spaca3^{tm1Osb}/M6F.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: Center for Animal Resources and Development

Usage and Citation Metrics

We found 274 mentions in open access literature.

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

Strohmer B, et al. (2026) Spinal circuit mechanisms constrain therapeutic windows for ALS intervention: A computational modeling study. *Neurobiology of disease*, 219, 107253.

Wan F, et al. (2026) Intravenous administration of an engineered AAV9-gene-silencing vector suppresses human SOD1 and extends survival in an ALS mouse model. *Nature communications*, 17(1).

Ryu IS, et al. (2026) Modulation of the miR-485-3p/PGC-1 β Pathway by ASO-Loaded Nanoparticles Attenuates ALS Pathogenesis. *International journal of molecular sciences*, 27(2).

Gunner G, et al. (2025) Gasdermin D is activated but does not drive neurodegeneration in SOD1G93A model of ALS: Implications for targeting pyroptosis. *Neurobiology of disease*, 214, 107048.

Hwang DW, et al. (2025) Image-Guided Monitoring of Mitochondria and Blood-Brain Barrier Dysfunction in Amyotrophic Lateral Sclerosis Mice. *Biomaterials research*, 29, 0162.

Hale OJ, et al. (2024) Mass spectrometry imaging of SOD1 protein-metal complexes in SOD1G93A transgenic mice implicates demetalation with pathology. *Nature communications*, 15(1), 6518.

Chen LX, et al. (2024) Single-Nucleus RNA Sequencing Reveals the Spatiotemporal Dynamics of Disease-Associated Microglia in Amyotrophic Lateral Sclerosis. *Research (Washington, D.C.)*, 7, 0548.

Baindoor S, et al. (2024) Distinct fingerprints of tRNA-derived small non-coding RNA in animal models of neurodegeneration. *Disease models & mechanisms*, 17(11).

López-Royo T, et al. (2024) Differentially expressed lncRNAs in SOD1G93A mice skeletal muscle: H19, Myhas and Neat1 as potential biomarkers in amyotrophic lateral sclerosis. *Open biology*, 14(10), 240015.

Yan J, et al. (2024) TwinF interface inhibitor FP802 stops loss of motor neurons and mitigates disease progression in a mouse model of ALS. *Cell reports. Medicine*, 5(2), 101413.

- Wang YM, et al. (2024) TwinF interface inhibitor FP802 prevents retinal ganglion cell loss in a mouse model of amyotrophic lateral sclerosis. *Acta neuropathologica communications*, 12(1), 149.
- Miquel E, et al. (2024) Pyruvate dehydrogenase kinase 2 knockdown restores the ability of amyotrophic lateral sclerosis-linked SOD1G93A rat astrocytes to support motor neuron survival by increasing mitochondrial respiration. *Glia*, 72(5), 999.
- Marton S, et al. (2023) SOD1G93A Astrocyte-Derived Extracellular Vesicles Induce Motor Neuron Death by a miRNA-155-5p-Mediated Mechanism. *ASN neuro*, 15, 17590914231197527.
- Meanti R, et al. (2023) Protective Effects of Hexarelin and JMV2894 in a Human Neuroblastoma Cell Line Expressing the SOD1-G93A Mutated Protein. *International journal of molecular sciences*, 24(2).
- Tu LF, et al. (2023) GPX4 deficiency-dependent phospholipid peroxidation drives motor deficits of ALS. *Journal of advanced research*, 43, 205.
- Hernández S, et al. (2023) Persistent NRG1 Type III Overexpression in Spinal Motor Neurons Has No Therapeutic Effect on ALS-Related Pathology in SOD1G93A Mice. *Neurotherapeutics : the journal of the American Society for Experimental NeuroTherapeutics*, 20(6), 1820.
- Scarrott JM, et al. (2023) Ap4b1-knockout mouse model of hereditary spastic paraplegia type 47 displays motor dysfunction, aberrant brain morphology and ATG9A mislocalization. *Brain communications*, 5(1), fcac335.
- Fabrizio P, et al. (2023) Intramuscular IL-10 Administration Enhances the Activity of Myogenic Precursor Cells and Improves Motor Function in ALS Mouse Model. *Cells*, 12(7).
- Gao T, et al. (2023) Protective effects of intrathecal injection of AAV9-RabGGTB-GFP+ in SOD1G93A mice. *Frontiers in aging neuroscience*, 15, 1092607.
- Margotta C, et al. (2023) Immune-mediated myogenesis and acetylcholine receptor clustering promote a slow disease progression in ALS mouse models. *Inflammation and regeneration*, 43(1), 19.