

Resource Summary Report

Generated by [FDI Lab - SciCrunch.org](https://www.fdi-lab.org/) on May 7, 2025

FVB.Cg-Grm7Tg(SMN2)89AhmbSmn1 Tg(SMN2*delta7)4299Ahmb/J

RRID:IMSR_JAX:005025

Type: Organism

Proper Citation

RRID:IMSR_JAX:005025

Organism Information

URL: <https://www.jax.org/strain/005025>

Proper Citation: RRID:IMSR_JAX:005025

Description: Mus musculus with name FVB.Cg-Grm7Tg(SMN2)89Ahmb Smn1 Tg(SMN2*delta7)4299Ahmb/J from IMSR.

Species: Mus musculus

Synonyms: SMNdelta7;SMN2;Smn-/- FVB.Cg-Tg(SMN2*delta7)4299Ahmb Tg(SMN2)89Ahmb Smn1/J. Moderate Type II SMA mice. FVB.Cg-Tg(SMN2)89Ahmb Smn1 Tg(SMN2*delta7)4299Ahmb/J

Notes: gene symbol note: glutamate receptor; metabotropic 7|survival of motor neuron 2; centromeric|survival motor neuron 1|beta-galactosidase|survival of motor neuron 2; centromeric|transgene insertion 4299; Arthur H M Burghes|glutamate receptor; metabotropic 7|survival of motor neuron 2; centromeric|survival motor neuron 1|beta-galactosidase|survival of motor neuron 2; centromeric|transgene insertion 4299; Arthur H M Burghes; mutant strain: Grm7|SMN2|Smn1|lacZ|SMN2|Tg(SMN2*delta7)4299Ahmb|Grm7|SMN2|Smn1|lacZ|SMN2|Tg(SMN2*

Affected Gene: glutamate receptor; metabotropic 7|survival of motor neuron 2; centromeric|survival motor neuron 1|beta-galactosidase|survival of motor neuron 2; centromeric|transgene insertion 4299; Arthur H M Burghes|glutamate receptor; metabotropic 7|survival of motor neuron 2; centromeric|survival motor neuron 1|beta-galactosidase|survival of motor neuron 2; centromeric|transgene insertion 4299; Arthur H M Burghes

Genomic Alteration: transgene insertion 89; Arthur H M Burghes|transgene insertion 4299; Arthur H M Burghes|targeted mutation 1; Michael Sendtner|targeted mutation 1; Michael

Sendtner|transgene insertion 89; Arthur H M Burghes|transgene insertion 4299; Arthur H M Burghes|transgene insertion 89; Arthur H M Burghes|transgene insertion 4299; Arthur H M Burghes|targeted mutation 1; Michael Sendtner|targeted mutation 1; Michael Sendtner|transgene insertion 89; Arthur H M Burghes|transgene insertion 4299; Arthur H M Burghes

Catalog Number: JAX:005025

Database: International Mouse Resource Center IMSR, JAX

Database Abbreviation: IMSR

Availability: live

Alternate IDs: IMSR_JAX:5025

Organism Name: FVB.Cg-Grm7^{Tg(SMN2)⁸⁹Ahmb} Smn1 Tg(SMN2*delta7)⁴²⁹⁹Ahmb/J

Record Creation Time: 20230509T193245+0000

Record Last Update: 20250412T090325+0000

Ratings and Alerts

No rating or validation information has been found for FVB.Cg-Grm7^{Tg(SMN2)⁸⁹Ahmb} Smn1 Tg(SMN2*delta7)⁴²⁹⁹Ahmb/J.

No alerts have been found for FVB.Cg-Grm7^{Tg(SMN2)⁸⁹Ahmb} Smn1 Tg(SMN2*delta7)⁴²⁹⁹Ahmb/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: International Mouse Resource Center IMSR, JAX

Usage and Citation Metrics

We found 10 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

Pagiazitis JG, et al. (2025) Catecholaminergic dysfunction drives postural and locomotor deficits in a mouse model of spinal muscular atrophy. Cell reports, 44(1), 115147.

Hann SH, et al. (2024) Depletion of SMN protein in mesenchymal progenitors impairs the development of bone and neuromuscular junction in spinal muscular atrophy. *eLife*, 12.

Sutton ER, et al. (2024) Liver SMN restoration rescues the *Smn2B/-* mouse model of spinal muscular atrophy. *EBioMedicine*, 110, 105444.

Hennlein L, et al. (2023) Plastin 3 rescues cell surface translocation and activation of TrkB in spinal muscular atrophy. *The Journal of cell biology*, 222(3).

Kim JK, et al. (2023) A spinal muscular atrophy modifier implicates the SMN protein in SNARE complex assembly at neuromuscular synapses. *Neuron*, 111(9), 1423.

Tisdale S, et al. (2022) SMN controls neuromuscular junction integrity through U7 snRNP. *Cell reports*, 40(12), 111393.

Miralles MP, et al. (2022) Survival motor neuron protein and neurite degeneration are regulated by Gemin3 in spinal muscular atrophy motoneurons. *Frontiers in cellular neuroscience*, 16, 1054270.

Vukojicic A, et al. (2019) The Classical Complement Pathway Mediates Microglia-Dependent Remodeling of Spinal Motor Circuits during Development and in SMA. *Cell reports*, 29(10), 3087.

Simon CM, et al. (2019) Stasimon Contributes to the Loss of Sensory Synapses and Motor Neuron Death in a Mouse Model of Spinal Muscular Atrophy. *Cell reports*, 29(12), 3885.

Luchetti A, et al. (2015) A Perturbed MicroRNA Expression Pattern Characterizes Embryonic Neural Stem Cells Derived from a Severe Mouse Model of Spinal Muscular Atrophy (SMA). *International journal of molecular sciences*, 16(8), 18312.