

Resource Summary Report

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B6.129P2-Fmr1^{tm1Cgr}/J

RRID:IMSR_JAX:003025

Type: Organism

Proper Citation

RRID:IMSR_JAX:003025

Organism Information

URL: <https://www.jax.org/strain/003025>

Proper Citation: RRID:IMSR_JAX:003025

Description: Mus musculus with name B6.129P2-Fmr1^{tm1Cgr}/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: fragile X messenger ribonucleoprotein 1; mutant strain|congenic strain: Fmr1

Affected Gene: fragile X messenger ribonucleoprotein 1

Genomic Alteration: targeted mutation 1; Ben Oostra

Catalog Number: JAX:003025

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: B6.129P2-Fmr1^{tm1Cgr}/J

Record Creation Time: 20250513T053636+0000

Record Last Update: 20260725T044346+0000

Ratings and Alerts

No rating or validation information has been found for B6.129P2-Fmr1^{tm1Cgr}/J.

No alerts have been found for B6.129P2-Fmr1^{tm1Cgr}/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 75 mentions in open access literature.

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

Barnes SA, et al. (2025) Non-ionotropic signaling through the NMDA receptor GluN2B carboxy-terminal domain drives dendritic spine plasticity and reverses fragile X phenotypes. *Cell reports*, 44(3), 115311.

Vlasits AL, et al. (2025) Atypical Retinal Ganglion Cell Function in a Mouse Model of Fragile X Syndrome. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 45(27).

Xian P, et al. (2025) Mitochondrial dysfunction reveals H₂S-mediated synaptic sulfhydrylation as a potential mechanism for autism-associated social defects. *Cell metabolism*.

Issa F, et al. (2025) Conditional deletion of TRPC1 channel modulates synaptic plasticity, long term depression, and memory extinction in Fragile X syndrome mice. *iScience*, 28(8), 113085.

Nareddula S, et al. (2025) FMRP restoration in parvalbumin interneurons: A circuit-specific improvement of visual learning in fragile X syndrome. *iScience*, 28(12), 114132.

Wang HB, et al. (2025) Scheduled feeding improves behavioral outcomes and reduces inflammation in a mouse model of fragile X syndrome. *eLife*, 14.

Wagner VA, et al. (2025) Astrocytic GABA controls fidelity of temporal cortical processing in Fragile X Syndrome. *Neurobiology of disease*, 219, 107233.

Norman AO, et al. (2025) Differential effects of sound repetition rate on auditory cortex development and behavior in fragile X syndrome mouse model. *Experimental neurology*, 387, 115184.

Bridi MCD, et al. (2025) Daily oscillation of the excitation/inhibition ratio is disrupted in two mouse models of autism. *iScience*, 28(1), 111494.

Lee Y, et al. (2025) Brain-wide mapping of immune receptors uncovers a neuromodulatory role of IL-17E and the receptor IL-17RB. *Cell*, 188(8), 2203.

Deng J, et al. (2024) Suppression of astrocyte BMP signaling improves fragile X syndrome molecular signatures and functional deficits. *bioRxiv : the preprint server for biology*.

Pan YD, et al. (2024) Intermittent Hypobaric Hypoxia Ameliorates Autistic-Like Phenotypes in Mice. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 44(7).

Al Abed AS, et al. (2024) Parvalbumin interneuron activity in autism underlies susceptibility to PTSD-like memory formation. *iScience*, 27(5), 109747.

Banke TG, et al. (2024) Early expression of GluN2A-containing NMDA receptors in a model of fragile X syndrome. *Journal of neurophysiology*, 131(4), 768.

Barnes SA, et al. (2024) Non-ionotropic signaling through the NMDA receptor GluN2B carboxy terminal domain drives morphological plasticity of dendritic spines and reverses fragile X phenotypes in mouse hippocampus. *bioRxiv : the preprint server for biology*.

Van't Spijker HM, et al. (2024) FMRP regulation of aggrecan mRNA translation controls perineuronal net development. *Journal of neurochemistry*.

Volianskis R, et al. (2024) Cage effects on synaptic plasticity and its modulation in a mouse model of fragile X syndrome. *Philosophical transactions of the Royal Society of London. Series B, Biological sciences*, 379(1906), 20230484.

Subramanian M, et al. (2024) Growth-suppressor microRNAs mediate synaptic overgrowth and behavioral deficits in Fragile X mental retardation protein deficiency. *iScience*, 27(1), 108676.

Kumar V, et al. (2024) mGluR7 allosteric modulator AMN082 corrects protein synthesis and pathological phenotypes in FXS. *EMBO molecular medicine*, 16(3), 506.

Caron C, et al. (2024) Sex-specific loss of mitochondrial membrane integrity in the auditory brainstem of a mouse model of Fragile X syndrome. *bioRxiv : the preprint server for biology*.