# Resource Summary Report

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## FVB.129P2-Pde6b$^{+}$ Tyr Fmr1/J

RRID:IMSR_JAX:004624
Type: Organism

### Proper Citation

RRID:IMSR_JAX:004624

### Organism Information

**URL:** https://www.jax.org/strain/004624

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**Description:** Mus musculus with name FVB.129P2-Pde6b$^{+}$ Tyr Fmr1/J from IMSR.

**Species:** Mus musculus

**Synonyms:** FVB.129P2-Fmr1/J

**Notes:** gene symbol note: phosphodiesterase 6B; cGMP; rod receptor; beta polypeptide|tyrosinase|fragile X messenger ribonucleoprotein 1; mutant strain|congenic strain: Pde6b|Tyr|Fmr1

**Affected Gene:** phosphodiesterase 6B; cGMP; rod receptor; beta polypeptide|tyrosinase|fragile X messenger ribonucleoprotein 1

**Genomic Alteration:** wild type|chinchilla|targeted mutation 1; Ben Oostra

**Catalog Number:** JAX:004624

**Database:** JAX Mice and Services

**Database Abbreviation:** JAX

**Availability:** live

**Organism Name:** FVB.129P2-Pde6b$^{+}$ Tyr Fmr1/J

**Record Creation Time:** 20250513T053645+0000

**Record Last Update:** 20260808T050847+0000

### Ratings and Alerts

No rating or validation information has been found for FVB.129P2-Pde6b$^{+}$ Tyr Fmr1/J.

No alerts have been found for FVB.129P2-Pde6b$^{+}$ Tyr Fmr1/J.

## Data and Source Information

**Source:** Integrated Animals

**Source Database:** JAX Mice and Services

## Usage and Citation Metrics

We found 26 mentions in open access literature.

**Listed below are recent publications.** The full list is available at nidm-terms .


Lacher RK, et al. (2026) FMR1 gene therapy restores translationally relevant phenotypes in a mouse model for fragile X syndrome. Gene therapy.

Möhrle D, et al. (2026) Altered Auditory Maturation in Fragile X Syndrome and Its Involvement in Audiogenic Seizure Susceptibility. Autism research : official journal of the International Society for Autism Research, 19(1), e70152.

Tuma J, et al. (2025) Altered olfactory responses in Fmr1 KO mice. Scientific reports, 15(1), 2952.

Zhang S, et al. (2025) Therapeutic GSK-3? targeting stabilizes multifunctional ?-catenin to rescue neuronal and behavioral deficits in fragile X messenger ribonucleoprotein 1 knockout mice. Brain research bulletin, 235, 111710.

Maio B, et al. (2024) Protocol for identifying sound-activated neurons in the inferior colliculus by cFos immunostaining. STAR protocols, 5(4), 103482.

Deng PY, et al. (2024) Circuit-based intervention corrects excessive dentate gyrus output in the fragile X mouse model. eLife, 12.

Louros SR, et al. (2023) Excessive proteostasis contributes to pathology in fragile X syndrome. Neuron, 111(4), 508.

Lindenmaier Z, et al. (2022) Examining the effect of chronic intranasal oxytocin administration on the neuroanatomy and behavior of three autism-related mouse models. NeuroImage, 257, 119243.

Deng PY, et al. (2022) FMRP regulates GABAA receptor channel activity to control signal integration in hippocampal granule cells. Cell reports, 39(7), 110820.

Sibille J, et al. (2022) Absence of the Fragile X messenger ribonucleoprotein alters response patterns to sounds in the auditory midbrain. Frontiers in neuroscience, 16, 987939.

Layman E, et al. (2022) Protocol for assessing phagocytosis activity in cultured primary murine microglia. STAR protocols, 3(4), 101881.

Hwang JY, et al. (2022) CPEB3-dependent increase in GluA2 subunits impairs excitatory transmission onto inhibitory interneurons in a mouse model of fragile X. Cell reports, 39(10), 110853.

Barajas M, et al. (2021) The newborn Fmr1 knockout mouse: a novel model of excess ubiquinone and closed mitochondrial permeability transition pore in the developing heart. Pediatric research, 89(3), 456.

Park E, et al. (2021) FMRP Interacts with RAR? in Synaptic Retinoic Acid Signaling and Homeostatic Synaptic Plasticity. International journal of molecular sciences, 22(12).

Licznerski P, et al. (2020) ATP Synthase c-Subunit Leak Causes Aberrant Cellular Metabolism in Fragile X Syndrome. Cell, 182(5), 1170.

Li J, et al. (2020) Defective memory engram reactivation underlies impaired fear memory recall in Fragile X syndrome. eLife, 9.

Cheng K, et al. (2019) Calsyntenin-1 Negatively Regulates ICAM5 Accumulation in Postsynaptic Membrane and Influences Dendritic Spine Maturation in a Mouse Model of Fragile X Syndrome. Frontiers in neuroscience, 13, 1098.

Antoine MW, et al. (2019) Increased Excitation-Inhibition Ratio Stabilizes Synapse and Circuit Excitability in Four Autism Mouse Models. Neuron, 101(4), 648.

Rogers TD, et al. (2017) Effects of a social stimulus on gene expression in a mouse model of fragile X syndrome. Molecular autism, 8, 30.

Thomson SR, et al. (2017) Cell-Type-Specific Translation Profiling Reveals a Novel Strategy for Treating Fragile X Syndrome. Neuron, 95(3), 550.