

Resource Summary Report

Generated by [dkNET](#) on Aug 16, 2026

B6;CBA-Tg(Gnrh1-EGFP)51Sumo/J

RRID:IMSR_JAX:033639

Type: Organism

Proper Citation

RRID:IMSR_JAX:033639

Organism Information

URL: <https://www.jax.org/strain/033639>

Proper Citation: RRID:IMSR_JAX:033639

Description: Mus musculus with name B6;CBA-Tg(Gnrh1-EGFP)51Sumo/J from IMSR.

Species: Mus musculus

Synonyms: B6.Cg-Tg(Gnrh1-EGFP)51Sumo/J

Notes: gene symbol note: transgene insertion 51; Suzanne Moenter; mutant stock: Tg(Gnrh1-EGFP)51Sumo

Affected Gene: transgene insertion 51; Suzanne Moenter

Genomic Alteration: transgene insertion 51; Suzanne Moenter

Catalog Number: JAX:033639

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: sperm

Organism Name: B6;CBA-Tg(Gnrh1-EGFP)51Sumo/J

Record Creation Time: 20250513T053837+0000

Record Last Update: 20260815T050746+0000

Ratings and Alerts

No rating or validation information has been found for B6;CBA-Tg(Gnrh1-EGFP)51Sumo/J.

No alerts have been found for B6;CBA-Tg(Gnrh1-EGFP)51Sumo/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 22 mentions in open access literature.

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

Jaime J, et al. (2022) GnRH Neuron Excitability and Action Potential Properties Change with Development But Are Not Affected by Prenatal Androgen Exposure. *eNeuro*, 9(6).

Dairaghi L, et al. (2022) The Dopamine D4 Receptor Regulates Gonadotropin-Releasing Hormone Neuron Excitability in Male Mice. *eNeuro*, 9(2).

DeFazio RA, et al. (2021) Gonadotropin-Releasing Hormone (GnRH) Neuron Potassium Currents and Excitability in Both Sexes Exhibit Minimal Changes upon Removal of Negative Feedback. *eNeuro*, 8(4).

Vastagh C, et al. (2021) Networking of glucagon-like peptide-1 axons with GnRH neurons in the basal forebrain of male mice revealed by 3DISCO-based immunocytochemistry and optogenetics. *Brain structure & function*, 226(1), 105.

Vanacker C, et al. (2021) A role for glial fibrillary acidic protein (GFAP)-expressing cells in the regulation of gonadotropin-releasing hormone (GnRH) but not arcuate kisspeptin neuron output in male mice. *eLife*, 10.

Vastagh C, et al. (2020) Gonadal Cycle-Dependent Expression of Genes Encoding Peptide-, Growth Factor-, and Orphan G-Protein-Coupled Receptors in Gonadotropin-Releasing Hormone Neurons of Mice. *Frontiers in molecular neuroscience*, 13, 594119.

Pinet-Charvet C, et al. (2020) Beta-nerve growth factor stimulates spontaneous electrical activity of in vitro embryonic mouse GnRH neurons through a P75 mediated-mechanism. *Scientific reports*, 10(1), 10654.

Dulka EA, et al. (2020) Chemogenetic Suppression of GnRH Neurons during Pubertal Development Can Alter Adult GnRH Neuron Firing Rate and Reproductive Parameters in Female Mice. *eNeuro*, 7(3).

Rijal S, et al. (2020) Melatonin Suppresses the Kainate Receptor-Mediated Excitation on Gonadotropin-Releasing Hormone Neurons in Female and Male Prepubertal Mice. *International journal of molecular sciences*, 21(17).

Holland S, et al. (2019) The influence of maternal androgen excess on the male reproductive axis. *Scientific reports*, 9(1), 18908.

Silva MSB, et al. (2019) Activation of arcuate nucleus GABA neurons promotes luteinizing hormone secretion and reproductive dysfunction: Implications for polycystic ovary syndrome. *EBioMedicine*, 44, 582.

Constantin S, et al. (2018) Nociceptin/Orphanin-FQ Inhibits Gonadotropin-Releasing Hormone Neurons via G-Protein-Gated Inwardly Rectifying Potassium Channels. *eNeuro*, 5(6).

Lainez NM, et al. (2018) Diet-Induced Obesity Elicits Macrophage Infiltration and Reduction in Spine Density in the Hypothalamus of Male but Not Female Mice. *Frontiers in immunology*, 9, 1992.

Dairaghi L, et al. (2018) Reelin Can Modulate Migration of Olfactory Ensheathing Cells and Gonadotropin Releasing Hormone Neurons via the Canonical Pathway. *Frontiers in cellular neuroscience*, 12, 228.

Barab??s K, et al. (2018) The Role of Interleukin-10 in Mediating the Effect of Immune Challenge on Mouse Gonadotropin-Releasing Hormone Neurons In Vivo. *eNeuro*, 5(5).

Raftogianni A, et al. (2018) Deciphering the Contributions of CRH Receptors in the Brain and Pituitary to Stress-Induced Inhibition of the Reproductive Axis. *Frontiers in molecular neuroscience*, 11, 305.

Taylor-Burds C, et al. (2015) Chloride Accumulators NKCC1 and AE2 in Mouse GnRH Neurons: Implications for GABAA Mediated Excitation. *PloS one*, 10(6), e0131076.

Giacobini P, et al. (2014) Brain endothelial cells control fertility through ovarian-steroid-dependent release of semaphorin 3A. *PLoS biology*, 12(3), e1001808.

Low VF, et al. (2012) Netrin-1 stimulates developing GnRH neurons to extend neurites to the median eminence in a calcium- dependent manner. *PloS one*, 7(10), e46999.

Hrabovszky E, et al. (2011) Sexual dimorphism of kisspeptin and neurokinin B immunoreactive neurons in the infundibular nucleus of aged men and women. *Frontiers in endocrinology*, 2, 80.