

Resource Summary Report

Generated by [kravitz2](#) on Aug 3, 2026

LE-Tg(Drd2-iCre)1Ottc

RRID:RRRC_00768

Type: Organism

Proper Citation

RRID:RRRC_00768

Organism Information

URL: http://rgd.mcw.edu/tools/strains/strains_view.cgi?id=10412327

Proper Citation: RRID:RRRC_00768

Description: Rattus norvegicus with name LE-Tg(Drd2-iCre)1Ottc from RGD.

Species: Rattus norvegicus

Notes: The transgene expresses BAC transgenic using rat dopamine receptor 2 promoter to express Cre recombinase in D2R neurons [Optogenetics and Transgenic Technology Core](#), [Rat Resource and Research Center](#)

Catalog Number: 00768

Background: transgenic

Database: Rat Resource and Research Center (RRRC)

Database Abbreviation: RRRC

Availability: Live Animals (as of 2019-03-18)

Alternate IDs: RGD_10412327, 10412327, RRRC_768, RRRC_0768, RRRC_00768

Organism Name: LE-Tg(Drd2-iCre)1Ottc

Record Creation Time: 20230607T202007+0000

Record Last Update: 20260801T100215+0000

Ratings and Alerts

No rating or validation information has been found for LE-Tg(Drd2-iCre)1Ottc .

No alerts have been found for LE-Tg(Drd2-iCre)1Ottc .

Data and Source Information

Source: [Integrated Animals](#)

Source Database: Rat Resource and Research Center (RRRC)

Usage and Citation Metrics

We found 13 mentions in open access literature.

Listed below are recent publications. The full list is available at [kravitz2](#) .

Jennings SD, et al. (2025) Effects of Chronic Social Isolation Stress and Alcohol on the Reinforcing Properties of Ketamine in Male and Female Rats. *eNeuro*, 12(3).

Beacher NJ, et al. (2025) Miniscope Imaging of Nucleus Accumbens Neural Activity in Freely Behaving Rats: Virus Injection, Gradient Index Lens Implantation, Recording Strategies, and Analytical Methods. *Current protocols*, 5(1), e70090.

Mitra S, et al. (2024) A Novel Role for the Histone Demethylase JMJD3 in Mediating Heroin-Induced Relapse-Like Behaviors. *Biological psychiatry*.

Hagarty DP, et al. (2024) Exploring ketamine's reinforcement, cue-induced reinstatement, and nucleus accumbens cFos activation in male and female long evans rats. *Neuropharmacology*, 255, 110008.

Swinford-Jackson SE, et al. (2023) Low frequency deep brain stimulation of nucleus accumbens shell neuronal subpopulations attenuates cocaine seeking selectively in male rats. *Addiction neuroscience*, 9.

Truckenbrod LM, et al. (2023) Circuit and Cell-Specific Contributions to Decision Making Involving Risk of Explicit Punishment in Male and Female Rats. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 43(26), 4837.

Zhang Y, et al. (2023) Calcitonin receptor signaling in nucleus accumbens D1R- and D2R-expressing medium spiny neurons bidirectionally alters opioid taking in male rats. *Neuropsychopharmacology : official publication of the American College of Neuropsychopharmacology*, 48(13), 1878.

Okas M, et al. (2023) A brief exposure to toluene vapor alters the intrinsic excitability of D2 medium spiny neurons in the rat ventral striatum. *Frontiers in neuroscience*, 17, 1235866.

Swinford-Jackson SE, et al. (2023) High frequency DBS-like optogenetic stimulation of nucleus accumbens dopamine D2 receptor-containing neurons attenuates cocaine reinstatement in male rats. *Neuropsychopharmacology : official publication of the American College of Neuropsychopharmacology*, 48(3), 459.

Kruyer A, et al. (2022) Astrocytes in the ventral pallidum extinguish heroin seeking through GAT-3 upregulation and morphological plasticity at D1-MSN terminals. *Molecular*

psychiatry, 27(2), 855.

Strong CE, et al. (2020) Chemogenetic selective manipulation of nucleus accumbens medium spiny neurons bidirectionally controls alcohol intake in male and female rats. Scientific reports, 10(1), 19178.

Zhang Y, et al. (2020) Activation of GLP-1 receptors attenuates oxycodone taking and seeking without compromising the antinociceptive effects of oxycodone in rats. Neuropsychopharmacology : official publication of the American College of Neuropsychopharmacology, 45(3), 451.

Martin JA, et al. (2019) A novel role for the actin-binding protein drebrin in regulating opiate addiction. Nature communications, 10(1), 4140.