

Resource Summary Report

Generated by [dkNET](#) on Aug 17, 2026

GT1-7

RRID:CVCL_0281

Type: Cell Line

Proper Citation

CLS Cat# 305779, RRID:CVCL_0281

Cell Line Information

URL: https://web.expasy.org/cellosaurus/CVCL_0281

Proper Citation: CLS Cat# 305779, RRID:CVCL_0281

Description: Cell line GT1-7 is a Transformed cell line with a species of origin Mus musculus (Mouse)

Defining Citation: [PMID:1714837](#), [PMID:2196069](#), [PMID:10830297](#), [PMID:18406727](#)

Comments: Characteristics: Exhibits high levels of GnRH1 expression and secretes GnRH in response to depolarization.

Category: Transformed cell line

Organism: Mus musculus (Mouse)

Name: GT1-7

Cross References: BTO:BTO_0002708, MCCL:MCC:0000172, BCRJ:0095, CLS:305779, Lonza:687, Millipore:SCC116, TOKU-E:4052, Wikidata:Q54871828

ID: CVCL_0281

Vendor: CLS

Catalog Number: 305779

Hierarchy: cvcl_6235

Record Creation Time: 20260408T073342+0000

Record Last Update: 20260816T002527+0000

Ratings and Alerts

No rating or validation information has been found for GT1-7.

No alerts have been found for GT1-7.

Data and Source Information

Source: [Cellosaurus](#)

Usage and Citation Metrics

We found 109 mentions in open access literature.

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

Mori K, et al. (2026) Muscle-derived Mimecan regulates hypothalamus-brown adipose tissue communication and promotes health and lifespan in mice. *Cell metabolism*, 38(7), 1425.

Manceau R, et al. (2024) Neuronal lipid droplets play a conserved and sex-biased role in maintaining whole-body energy homeostasis. *bioRxiv : the preprint server for biology*.

Sakakibara O, et al. (2023) Effectiveness of Albumin-Fused Thioredoxin against 6-Hydroxydopamine-Induced Neurotoxicity In Vitro. *International journal of molecular sciences*, 24(11).

Oleari R, et al. (2023) Autism-linked NLGN3 is a key regulator of gonadotropin-releasing hormone deficiency. *Disease models & mechanisms*, 16(3).

Ferreira V, et al. (2023) Hypothalamic JNK1-hepatic fatty acid synthase axis mediates a metabolic rewiring that prevents hepatic steatosis in male mice treated with olanzapine via intraperitoneal: Additional effects of PTP1B inhibition. *Redox biology*, 63, 102741.

Kim MH, et al. (2023) LepRb⁺ cell-specific deletion of Slug mitigates obesity and nonalcoholic fatty liver disease in mice. *The Journal of clinical investigation*, 133(4).

Lv H, et al. (2023) A small-molecule degrader of TET3 as treatment for anorexia nervosa in an animal model. *Proceedings of the National Academy of Sciences of the United States of America*, 120(16), e2300015120.

Balsevich G, et al. (2023) A genetic variant of fatty acid amide hydrolase (FAAH) exacerbates hormone-mediated orexigenic feeding in mice. *eLife*, 12.

Yang X, et al. (2022) The m6A mRNA demethylase FTO regulates GnRH secretion in Mn-induced precocious puberty. *Molecular and cellular endocrinology*, 542, 111523.

Bar-Sadeh B, et al. (2022) Epigenetic regulation of 5 α reductase-1 underlies adaptive plasticity of reproductive function and pubertal timing. *BMC biology*, 20(1), 11.

Strembitska A, et al. (2022) Lipid biosynthesis enzyme Agpat5 in AgRP-neurons is required for insulin-induced hypoglycemia sensing and glucagon secretion. *Nature*

communications, 13(1), 5761.

Liu H, et al. (2022) LKB1 alleviates high glucose? and high fat?induced inflammation and the expression of GnRH and sexual precocity?related genes, in mouse hypothalamic cells by activating the AMPK/FOXO1 signaling pathway. *Molecular medicine reports*, 25(4).

Caballero E, et al. (2022) Amyloid Beta Oligomers-Induced Ca²⁺ Entry Pathways: Role of Neuronal Networks, NMDA Receptors and Amyloid Channel Formation. *Biomedicines*, 10(5).

Whittsette AL, et al. (2022) The endoplasmic reticulum membrane complex promotes proteostasis of GABAA receptors. *iScience*, 25(8), 104754.

Zhang J, et al. (2022) EphA3 deficiency in the hypothalamus promotes high-fat diet-induced obesity in mice. *Journal of biomedical research*, 37(3), 179.

Lumkwana D, et al. (2022) Investigating the Role of Spermidine in a Model System of Alzheimer's Disease Using Correlative Microscopy and Super-resolution Techniques. *Frontiers in cell and developmental biology*, 10, 819571.

Mizuno D, et al. (2022) Enhancing Cytotoxicity of Tamoxifen Using Geranium Oil. *Evidence-based complementary and alternative medicine : eCAM*, 2022, 8091339.

Zhang Y, et al. (2022) Effects of Fuyou Formula on GnRH Secretion and Related Gene Expression in Treating Precocious Puberty. *Frontiers in pharmacology*, 13, 852550.

Barba-Bon A, et al. (2022) Boron clusters as broadband membrane carriers. *Nature*, 603(7902), 637.

Webert L, et al. (2022) Analysis of the Glucose-Dependent Transcriptome in Murine Hypothalamic Cells. *Cells*, 11(4).