

Resource Summary Report

Generated by [NIF](#) on Aug 19, 2026

BTBR T⁺ Itpr3/J

RRID:IMSR_JAX:002282

Type: Organism

Proper Citation

RRID:IMSR_JAX:002282

Organism Information

URL: <https://www.jax.org/strain/002282>

Proper Citation: RRID:IMSR_JAX:002282

Description: Mus musculus with name BTBR T⁺ Itpr3/J from IMSR.

Species: Mus musculus

Synonyms: BTBR T⁺ tf/J

Notes: gene symbol note: brachyury; T-box transcription factor T|latent transforming growth factor beta binding protein 4|cytochrome c oxidase subunit 7A2 like|inositol 1;4;5-triphosphate receptor 3|nonagouti|dorsal inhibitory axon guidance protein|disrupted in schizophrenia 1; mutant strain|inbred strain: T|Ltp4|Cox7a2|Itpr3|a|Draxin|Disc1

Affected Gene: brachyury; T-box transcription factor T|latent transforming growth factor beta binding protein 4|cytochrome c oxidase subunit 7A2 like|inositol 1;4;5-triphosphate receptor 3|nonagouti|dorsal inhibitory axon guidance protein|disrupted in schizophrenia 1

Genomic Alteration: wild type|Duchenne modifier 1 resistant|long|tufted|black and tan|mutation 1|deletion

Catalog Number: JAX:002282

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: BTBR T⁺ Itpr3/J

Record Creation Time: 20250513T053630+0000

Record Last Update: 20260815T050540+0000

Ratings and Alerts

No rating or validation information has been found for BTBR T⁺ Itpr3/J.

No alerts have been found for BTBR T⁺ Itpr3/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 20 mentions in open access literature.

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

Viscomi MP, et al. (2026) Embryonic and placental factors are linked with the development of autism-like behaviors in the BTBR mouse model. *Neuroscience*, 593, 18.

Soto-Catalán M, et al. (2026) SOCS1-based therapeutic peptides improve liver disease and metabolic dysfunction in obesity and diabetes. *Scientific reports*, 16(1).

Viscomi MP, et al. (2026) Placental lipid droplets and histone marks reveal a metabolic-epigenetic phenotype in the BTBR mouse model of autism. *Placenta*, 181, 184.

Tavares GA, et al. (2026) Macrophage-mediated refinement of the dural lymphatic regulates social behavior. *Neuron*.

Harris SS, et al. (2025) The amyloid precursor family of proteins in excitatory neurons are essential for regulating cortico-hippocampal circuit dynamics in vivo. *Cell reports*, 44(6), 115801.

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

Ren W, et al. (2025) A tandem repeat atlas for the genome of inbred mouse strains: A genetic variation resource. *iScience*, 28(11), 113703.

Park JC, et al. (2025) Gut microbiota and brain-resident CD4⁺ T cells shape behavioral outcomes in autism spectrum disorder. *Nature communications*, 16(1), 6422.

McAdams ZL, et al. (2024) Supplier-origin gut microbiomes affect host body weight and select autism-related behaviors. *Gut microbes*, 16(1), 2385524.

Khan AH, et al. (2023) Genetic pathways regulating the longitudinal acquisition of cocaine self-administration in a panel of inbred and recombinant inbred mice. *Cell reports*, 42(8), 112856.

Murari K, et al. (2023) A clinically relevant selective ERK-pathway inhibitor reverses core deficits in a mouse model of autism. *EBioMedicine*, 91, 104565.

Borsani E, et al. (2022) Role of melatonin in autism spectrum disorders in a male murine transgenic model: Study in the prefrontal cortex. *Journal of neuroscience research*, 100(3), 780.

Sheppard K, et al. (2022) Stride-level analysis of mouse open field behavior using deep-learning-based pose estimation. *Cell reports*, 38(2), 110231.

Morcom L, et al. (2021) DRAXIN regulates interhemispheric fissure remodelling to influence the extent of corpus callosum formation. *eLife*, 10.

Martin LA, et al. (2021) Executive functions in agenesis of the corpus callosum: Working memory and sustained attention in the BTBR inbred mouse strain. *Brain and behavior*, 11(1), e01933.

Sharon G, et al. (2019) Human Gut Microbiota from Autism Spectrum Disorder Promote Behavioral Symptoms in Mice. *Cell*, 177(6), 1600.

Rhine MA, et al. (2019) Hypothesis-driven investigations of diverse pharmacological targets in two mouse models of autism. *Autism research : official journal of the International Society for Autism Research*, 12(3), 401.

Bumgardner SA, et al. (2018) Genetic influence on splenic natural killer cell frequencies and maturation among aged mice. *Experimental gerontology*, 104, 9.

Shin S, et al. (2018) *Drd3* Signaling in the Lateral Septum Mediates Early Life Stress-Induced Social Dysfunction. *Neuron*, 97(1), 195.

MacDonald JL, et al. (2018) Caveolin1 Identifies a Specific Subpopulation of Cerebral Cortex Callosal Projection Neurons (CPN) Including Dual Projecting Cortical Callosal/Frontal Projection Neurons (CPN/FPN). *eNeuro*, 5(1).