Resource Summary Report

Generated by dkNET on Sep 11, 2026

BZ555

RRID:WB-STRAIN:WBStrain00004039
Type: Organism

Proper Citation

RRID:WB-STRAIN:WBStrain00004039

Organism Information

URL: http://www.wormbase.org/db/get?name=WBStrain00004039

Proper Citation: RRID:WB-STRAIN:WBStrain00004039

Description: Caenorhabditis elegans with name egIs1[Pdat-1::gfp] from WB.

Species: Caenorhabditis elegans

Synonyms: egIs1[Pdat-1::gfp]

Notes: egIs1 [dat-1p::GFP] Bright GFP observable in dopamine neuronal soma and processes. For some reason this strain is resistant to neurotoxic effects of 6-OHDA compared to an independent strain BY200 (Nass et al., 2002). Or maybe BY200 is more sensitive to 6-OHDA due to its co-injection marker gene rol-6?|"Mutagen:TMP+UV"|"Mutagen:TMP/UV"|"Supplementary_genotype egIs1 [dat-1p::GFP]"|"WBStrain mapped, WBPaper00059778 added based on AFP_Strain data."|"WBStrain mapped, WBPaper00060969 added based on AFP_Strain data."|"[2020-08-03T21:08:32.594Z WBPerson324] Ressurect Strain: Genotype: egIs1[Pdat-1::gfp]"

Affected Gene: WBGene00000934(dat-1)

Genomic Alteration: WBGene00000934(dat-1)

Catalog Number: WB-STRAIN:WBStrain00004039

Database: WormBase (WB)

Database Abbreviation: WB

Availability: available

Source References: PMID:31323240, PMID:32510332, PMID:33524034, PMID:33674585, PMID:37080524, PMID:37119137, PMID:37155851, PMID:37416472, PMID:37254351, PMID:37828862, PMID:39205325, PMID:39186478, PMID:39369984

Alternate IDs: WB-STRAIN:BZ555, CGC_BZ555

Organism Name: BZ555

Record Creation Time: 20230227T013249+0000

Record Last Update: 20260905T114610+0000

Ratings and Alerts

No rating or validation information has been found for BZ555.

No alerts have been found for BZ555.

Data and Source Information

Source: Integrated Animals

Source Database: WormBase (WB)

Usage and Citation Metrics

We found 25 mentions in open access literature.

Listed below are recent publications. The full list is available at dkNET .

Hou Z, et al. (2026) Jujube Polysaccharide Promotes Neuroprotection and Longevity in Caenorhabditis elegans Through Oxidative Stress Resistance and Stress-Response Signaling. International journal of molecular sciences, 27(11).

Han RT, et al. (2026) Pyran compound 7r exerts neuroprotective effects against Parkinson's disease via modulating oxidative stress and autophagy. iScience, 29(6), 116233.

Romero-Sanz S, et al. (2025) Rescue of a Rotenone Model of Parkinson's Disease in C. elegans by the Mitochondrial Na+/Ca2+ Exchanger Inhibitor CGP37157. International journal of molecular sciences, 26(7).

Balkrishna A, et al. (2025) Neurogrit Gold Attenuates 6-OHDA-Induced Dopaminergic Neurodegeneration in Parkinson's Model of Caenorhabditis elegans by Reducing ?-Synuclein Accumulation and Pink/Pdr-1 Driven Mitochondrial Dysfunction. CNS neuroscience & therapeutics, 31(5), e70401.

Park KH, et al. (2025) Optogenetic induction of TDP-43 aggregation impairs neuronal integrity and behavior in Caenorhabditis elegans. Translational neurodegeneration, 14(1), 20.

Li L, et al. (2024) Dendrobium Nobile Alcohol Extract Extends the Lifespan of Caenorhabditis elegans via hsf-1 and daf-16. Molecules (Basel, Switzerland), 29(4).

Zhu FD, et al. (2024) Carpesii fructus extract exhibits neuroprotective effects in cellular and Caenorhabditis elegans models of Parkinson's disease. CNS neuroscience & therapeutics, 30(4), e14515.

Limke A, et al. (2024) Silica Nanoparticles Disclose a Detailed Neurodegeneration Profile throughout the Life Span of a Model Organism. Journal of xenobiotics, 14(1), 135.

Yin X, et al. (2024) Cysteine protease cathepsin B promotes lysosome integrity to extend the lifespan of alternative day fasting worms. Aging cell, 23(11), e14286.

Li H, et al. (2024) Dimethylsulfoniopropionate (DMSP) Increases Longevity and Mitochondrial Function in Caenorhabditis elegans: Implications for the Role of the Global Sulfur Cycle in Terrestrial Ecosystems. Environment & health (Washington, D.C.), 2(8), 572.

Ullah I, et al. (2024) Nicotine-mediated therapy for Parkinson's disease in transgenic Caenorhabditis elegans model. Frontiers in aging neuroscience, 16, 1358141.

Sun M, et al. (2024) TSG Extends the Longevity of Caenorhabditis elegans by Targeting the DAF-16/SKN-1/SIR-2.1-Mediated Mitochondrial Quality Control Process. Antioxidants (Basel, Switzerland), 13(9).

Chen X, et al. (2023) Impaired mitophagosome-lysosome fusion mediates olanzapine-induced aging. Aging cell, 22(11), e14003.

Fu RH, et al. (2023) Syringin Prevents 6-Hydroxydopamine Neurotoxicity by Mediating the MiR-34a/SIRT1/Beclin-1 Pathway and Activating Autophagy in SH-SY5Y Cells and the Caenorhabditis elegans Model. Cells, 12(18).

Fok A, et al. (2023) High-fidelity encoding of mechanostimuli by tactile food-sensing neurons requires an ensemble of ion channels. Cell reports, 42(5), 112452.

Petratou D, et al. (2023) A proton-inhibited DEG/ENaC ion channel maintains neuronal ionstasis and promotes neuronal survival under stress. iScience, 26(7), 107117.

Tabarraei H, et al. (2023) CCR4-NOT subunit CCF-1/CNOT7 promotes transcriptional activation to multiple stress responses in Caenorhabditis elegans. Aging cell, 22(4), e13795.

Ji H, et al. (2023) A proprioceptive feedback circuit drives Caenorhabditis elegans locomotor adaptation through dopamine signaling. Proceedings of the National Academy of Sciences of the United States of America, 120(20), e2219341120.

Kitisin T, et al. (2022) Infections of Cryptococcus species induce degeneration of dopaminergic neurons and accumulation of ?-Synuclein in Caenorhabditis elegans. Frontiers in cellular and infection microbiology, 12, 1039336.

Chen KS, et al. (2021) Small molecule inhibitors of ?-synuclein oligomers identified by targeting early dopamine-mediated motor impairment in C. elegans. Molecular neurodegeneration, 16(1), 77.