

Resource Summary Report

Generated by [dkNET](#) on Jul 30, 2026

SJ4103

RRID:WB-STRAIN:WBStrain00034069

Type: Organism

Proper Citation

RRID:WB-STRAIN:WBStrain00034069

Organism Information

URL: <http://www.wormbase.org/db/get?name=WBStrain00034069>

Proper Citation: RRID:WB-STRAIN:WBStrain00034069

Description: Caenorhabditis elegans with name zcls14(Pmyo-3::GFPmt) from WB.

Species: Caenorhabditis elegans

Synonyms: zcls14(Pmyo-3::GFPmt)

Notes: Generated from papers flagged positive during the last month for data type afp_strain/other_strain.|"Reference WBPaper00060516 added based on published strain data identified by Textpresso literature search."|"Supplementary_genotype zcls14 [myo-3::GFP(mit)]|"Supplementary_genotype [myo-3::GFP(mit)]|"WBStrain mapped, WBPaper00059578 added based on AFP_Strain data."|"WBStrain mapped, WBPaper00060029 added based on AFP_Strain data."|"WBStrain mapped, WBPaper00060923 added based on AFP_Strain data."|"WBStrain mapped, WBPaper00061072 added based on AFP_Strain data."|"WBStrain mapped, WBPaper00061110 added based on AFP_Strain data."|"WBStrain mapped, WBPaper00061409 added based on AFP_Strain data."|"WBStrain mapped, WBPaper00061527 added based on AFP_Strain data."|"WBStrain mapped, WBPaper00061562 added based on AFP_Strain data."|"WBStrain mapped, WBPaper00061617 added based on AFP_Strain data."|"WBStrain provided so WBPaper00060426 paper added based on AFP_Strain data."|"WBStrain provided so WBPaper00061698 paper added based on AFP_Strain data."|"WBStrain provided so WBPaper00061894 paper added based on AFP_Strain data."|"zcls14 [myo-3::GFP(mit)]. Stable transgenic line expressing GFP at high levels in mitochondria of body wall muscle. Slight developmental delay and reduced brood size observed."

Affected Gene: WBGene00003515(myo-3)

Genomic Alteration: WBGene00003515(myo-3)

Catalog Number: WB-STRAIN:WBStrain00034069

Database: WormBase (WB)

Database Abbreviation: WB

Availability: available

Source References: [PMID:32302543](#), [PMID:32656511](#), [PMID:32716378](#), [PMID:33087356](#), [PMID:33258406](#), [PMID:33319173](#), [PMID:33472069](#), [PMID:33542359](#), [PMID:33602504](#), [PMID:33654835](#), [PMID:34172445](#), [PMID:34060057](#), [PMID:34288362](#), [PMID:34496255](#), [PMID:36626986](#), [PMID:36774344](#), [PMID:36791646](#), [PMID:37060964](#), [PMID:37196064](#), [PMID:37427543](#), [PMID:37828862](#), [PMID:38361361](#), [PMID:38520690](#), [PMID:38740431](#), [PMID:39164296](#), [PMID:39260886](#), [PMID:39418305](#)

Alternate IDs: WB-STRAIN:SJ4103, CGC_SJ4103

Organism Name: SJ4103

Record Creation Time: 20230227T013636+0000

Record Last Update: 20260725T172336+0000

Ratings and Alerts

No rating or validation information has been found for SJ4103.

No alerts have been found for SJ4103.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: WormBase (WB)

Usage and Citation Metrics

We found 24 mentions in open access literature.

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

Pu L, et al. (2025) Shaker/Kv1 potassium channel SHK-1 protects against pathogen infection and oxidative stress in *C. elegans*. *PLoS genetics*, 21(2), e1011554.

Motwani S, et al. (2025) RICTOR regulates an interspecies crosstalk that influences longevity through a novel methionine cycle-mitophagy axis. *bioRxiv* : the preprint server for biology.

Li W, et al. (2024) The clinical antiprotozoal drug nitazoxanide and its metabolite tizoxanide extend *Caenorhabditis elegans* lifespan and healthspan. *Acta pharmaceutica Sinica. B*, 14(7), 3266.

- Zhang C, et al. (2024) Intestinal lysozyme1 deficiency alters microbiota composition and impacts host metabolism through the emergence of NAD⁺-secreting ASTB Qing110 bacteria. *mSystems*, 9(3), e0121423.
- Li R, et al. (2024) Protective Effects of Velvet Antler Methanol Extracts on Hypoxia-Induced Damage in *Caenorhabditis elegans* through HIF-1 and ECH-8 Mediated Lipid Accumulation. *Nutrients*, 16(14).
- Liu M, et al. (2024) N-Acetylcysteine Alleviates Impaired Muscular Function Resulting from Sphingosine Phosphate Lyase Functional Deficiency-Induced Sphingoid Base and Ceramide Accumulation in *Caenorhabditis elegans*. *Nutrients*, 16(11).
- Xia Q, et al. (2024) Peroxiredoxin 2 regulates DAF-16/FOXO mediated mitochondrial remodelling in response to exercise that is disrupted in ageing. *Molecular metabolism*, 88, 102003.
- Sharifi S, et al. (2024) Reducing the metabolic burden of rRNA synthesis promotes healthy longevity in *Caenorhabditis elegans*. *Nature communications*, 15(1), 1702.
- Zhou L, et al. (2024) Temperature perception by ER UPR promotes preventive innate immunity and longevity. *Cell reports*, 43(12), 115071.
- 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).
- 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.
- Tsai SH, et al. (2024) Peripheral peroxisomal α -oxidation engages neuronal serotonin signaling to drive stress-induced aversive memory in *C. elegans*. *Cell reports*, 43(4), 113996.
- Kim J, et al. (2024) Cross comparison of imaging strategies of mitochondria in *C. elegans* during aging. *bioRxiv : the preprint server for biology*.
- Chen TY, et al. (2024) Mitochondrial S-adenosylmethionine deficiency induces mitochondrial unfolded protein response and extends lifespan in *Caenorhabditis elegans*. *Aging cell*, 23(4), e14103.
- Zhu H, et al. (2024) Loss of the ceramide synthase HYL-2 from *Caenorhabditis elegans* impairs stress responses and alters sphingolipid composition. *The Journal of biological chemistry*, 300(6), 107320.
- Valera-Alberni M, et al. (2024) Novel imaging tools to study mitochondrial morphology in *Caenorhabditis elegans*. *Life science alliance*, 7(11).
- Taylor SKB, et al. (2024) The neurotrophic factor MANF regulates autophagy and lysosome function to promote proteostasis in *Caenorhabditis elegans*. *Proceedings of the National Academy of Sciences of the United States of America*, 121(43), e2403906121.

Xia Q, et al. (2023) Peroxiredoxin 2 is required for the redox mediated adaptation to exercise. *Redox biology*, 60, 102631.

Morton KS, et al. (2023) Chronic high-sugar diet in adulthood protects *Caenorhabditis elegans* from 6-OHDA-induced dopaminergic neurodegeneration. *BMC biology*, 21(1), 252.

Tjahjono E, et al. (2021) Mitochondria-affecting small molecules ameliorate proteostasis defects associated with neurodegenerative diseases. *Scientific reports*, 11(1), 17733.