

Resource Summary Report

Generated by [NIF](#) on Aug 31, 2026

SJ4005

RRID:WB-STRAIN:WBStrain00034065

Type: Organism

Proper Citation

RRID:WB-STRAIN:WBStrain00034065

Organism Information

URL: <http://www.wormbase.org/db/get?name=WBStrain00034065>

Proper Citation: RRID:WB-STRAIN:WBStrain00034065

Description: Caenorhabditis elegans with name zcls4 [hsp-4::GFP] from WB.

Species: Caenorhabditis elegans

Synonyms: zcls4 [hsp-4::GFP]

Notes: Generated from papers flagged positive during the last month for data type afp_strain/other_strain.|"Mutagen:Psoralen and UV"|"Mutagen:Psoralin and UV"|"Supplementary_genotype zcls4 [Phsp-4GFP]"|"WBStrain mapped, WBPaper00059596 added based on AFP_Strain data."|"WBStrain mapped, WBPaper00059950 added based on AFP_Strain data."|"WBStrain mapped, WBPaper00060638 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 provided so WBPaper00059545 paper added based on AFP_Strain data."|"WBStrain provided so WBPaper00060410 paper added based on AFP_Strain data."|"WBStrain provided so WBPaper00060420 paper added based on AFP_Strain data."|"WBStrain provided so WBPaper00061805 paper added based on AFP_Strain data."|"WBStrain provided so WBPaper00061870 paper added based on AFP_Strain data."|"zcls4 [hsp-4::GFP] V. The hsp-4::GFP reporter integrated within the cluster of LG V. Animals express low levels of GFP under basal conditions. However, expression in the gut and hypodermis can increase in response to tunicamycin treatment or heat shock."

Catalog Number: WB-STRAIN:WBStrain00034065

Database: WormBase (WB)

Database Abbreviation: WB

Availability: available

Source References: [PMID:32550360](#), [PMID:31735670](#), [PMID:32294300](#), [PMID:32306217](#), [PMID:32640191](#), [PMID:32600387](#), [PMID:33006972](#), [PMID:32958476](#), [PMID:33216250](#), [PMID:33319173](#), [PMID:33542359](#), [PMID:33883621](#), [PMID:34172445](#), [PMID:34407398](#), [PMID:34467850](#), [PMID:35045336](#), [PMID:35602005](#), [PMID:36774344](#), [PMID:37103980](#), [PMID:37416472](#), [PMID:37500972](#), [PMID:37684042](#), [PMID:38100354](#), [PMID:38253120](#), [PMID:38403745](#), [PMID:38361361](#), [PMID:38852157](#), [PMID:38983916](#), [PMID:39235964](#), [PMID:39418305](#), [PMID:39436952](#)

Alternate IDs: WB-STRAIN:SJ4005, CGC_SJ4005

Organism Name: SJ4005

Record Creation Time: 20230227T013636+0000

Record Last Update: 20260829T162211+0000

Ratings and Alerts

No rating or validation information has been found for SJ4005.

No alerts have been found for SJ4005.

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 [NIF](#) .

Alcala A, et al. (2026) A non-canonical role for UPRER during heat stress in *C. elegans*. bioRxiv : the preprint server for biology.

Zhao C, et al. (2025) Temperature-dependent lifespan extension is achieved in miR-80-deleted *Caenorhabditis elegans* by NLP-45 to modulate endoplasmic reticulum unfolded protein responses. *Aging cell*, 24(1), e14345.

Pradhan S, et al. (2025) Pathogen infection induces sickness behaviors through neuromodulators linked to stress and satiety in *C. elegans*. *Nature communications*, 16(1), 3200.

Engelfriet ML, et al. (2025) Reprogramming gene expression in 'hibernating' *C. elegans* involves the IRE-1/XBP-1 pathway. *eLife*, 13.

- Cornell R, et al. (2025) Gas-sensing neurons prime mitochondrial fitness to offset metabolic stress. *bioRxiv : the preprint server for biology*.
- Pohl F, et al. (2025) Environmental NaCl affects *C. elegans* development and aging. *bioRxiv : the preprint server for biology*.
- Thirumaran P, et al. (2024) Endogenous fluorescent reporters for heat shock proteins are not detectable after stress induction. *microPublication biology*, 2024.
- Pees B, et al. (2024) The *Caenorhabditis elegans* proteome response to two protective *Pseudomonas* symbionts. *mBio*, 15(4), e0346323.
- 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.
- Li B, et al. (2024) Phloretic acid requires the insulin/IGF-1 pathway and autophagy to enhance stress resistance and extend the lifespan of *Caenorhabditis elegans*. *Frontiers in pharmacology*, 15, 1384227.
- Liu Y, et al. (2024) Neuronal PRDX-2-Mediated ROS Signaling Regulates Food Digestion via peripheral UPRmt Activation. *Nature communications*, 15(1), 10582.
- 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.
- Liu P, et al. (2024) UPRER-immunity axis acts as physiological food evaluation system that promotes aversion behavior in sensing low-quality food. *eLife*, 13.
- Wen YP, et al. (2024) Exploring the therapeutic potential of *Nelumbo nucifera* leaf extract against amyloid-beta-induced toxicity in the *Caenorhabditis elegans* model of Alzheimer's disease. *Frontiers in pharmacology*, 15, 1408031.
- Shi J, et al. (2024) Identification of BiP as a temperature sensor mediating temperature-induced germline sex reversal in *C. elegans*. *The EMBO journal*, 43(18), 4020.
- Zhou L, et al. (2024) Temperature perception by ER UPR promotes preventive innate immunity and longevity. *Cell reports*, 43(12), 115071.
- Nauta KM, et al. (2024) A high-throughput screening platform for discovering bacterial species and small molecules that modify animal physiology. *bioRxiv : the preprint server for biology*.
- Horowitz BB, et al. (2023) A transcriptional cofactor regulatory network for the *C. elegans* intestine. *G3 (Bethesda, Md.)*, 13(7).
- Okoro NO, et al. (2023) Polysaccharides Extracted from *Dendrobium officinale* Grown in Different Environments Elicit Varying Health Benefits in *Caenorhabditis elegans*. *Nutrients*, 15(12).
- Moreno A, et al. (2023) Examining Sporadic Cancer Mutations Uncovers a Set of Genes Involved in Mitochondrial Maintenance. *Genes*, 14(5).