

Resource Summary Report

Generated by [PRECISE-TBI](#) on Aug 30, 2026

PD4251

RRID:WB-STRAIN:WBStrain00030574

Type: Organism

Proper Citation

RRID:WB-STRAIN:WBStrain00030574

Organism Information

URL: <http://www.wormbase.org/db/get?name=WBStrain00030574>

Proper Citation: RRID:WB-STRAIN:WBStrain00030574

Description: Caenorhabditis elegans with name ccls4251 I; dpy-20(e1282) IV. from WB.

Species: Caenorhabditis elegans

Synonyms: ccls4251 I; dpy-20(e1282) IV.

Notes: ccls4251 [(pSAK2) myo-3p::GFP::LacZ::NLS + (pSAK4) myo-3p::mitochondrial GFP + dpy-20(+)] I. This strain produces GFP in all body wall muscles and vulval muscles, with a combination of mitochondrial and nuclear localization. ME0. Heterozygous males mate well. Integrated array (ccls4251) contains 3 plasmids: pSAK2 (myo-3 promoter driving a nuclear-targeted GFP-LacZ fusion), pSAK4 (myo-3 promoter driving mitochondrially targeted GFP), and a dpy-20 subclone. Array rescues dpy-20(e1282ts).|"WBStrain mapped, WBPaper00061072 added based on AFP_Strain data."|"WBStrain mapped, WBPaper00061110 added based on AFP_Strain data."

Affected Gene: WBGene00001079(dpy-20)

Genomic Alteration: WBGene00001079(dpy-20)

Catalog Number: WB-STRAIN:WBStrain00030574

Database: WormBase (WB)

Database Abbreviation: WB

Availability: available

Source References: [PMID:9486653](#), [PMID:31769755](#), [PMID:33602504](#), [PMID:33654835](#), [PMID:37043428](#), [PMID:37432924](#), [PMID:38799035](#), [PMID:39420966](#), [PMID:39612872](#)

Alternate IDs: WB-STRAIN:PD4251, CGC_PD4251

Organism Name: PD4251

Record Creation Time: 20230227T013609+0000

Record Last Update: 20260829T162113+0000

Ratings and Alerts

No rating or validation information has been found for PD4251.

No alerts have been found for PD4251.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: WormBase (WB)

Usage and Citation Metrics

We found 6 mentions in open access literature.

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

Richaud M, et al. (2025) Tardigrade Dsup extends *C. elegans* life span by impeding mitochondrial respiration and promoting oxidative stress resistance. *Science advances*, 11(44), eadx9669.

Kang M, et al. (2025) Bovine colostrum-derived exosomes alleviate muscle degeneration by modulating gut microbiota and metabolic homeostasis in atrophy models. *Journal of animal science and technology*, 67(4), 892.

Zheng Q, et al. (2025) Groundbreaking Insights Into SIRT1/NRF2-Mediated Ferroptosis Inhibition by Resveratrol in Parkinson's Disease Models. *CNS neuroscience & therapeutics*, 31(11), e70648.

Zhang J, et al. (2025) Phytochemical-rich *Eucommia ulmoides* leaf extract extends healthspan in *Caenorhabditis elegans* via the pmk-1/p38 MAPK pathway and mitochondrial homeostasis. *Frontiers in nutrition*, 12, 1680518.

Hernando G, et al. (2025) Unraveling anthelmintic targets and mechanisms of action of trans-cinnamaldehyde from cinnamon essential oil. *Scientific reports*, 15(1), 5422.

Camacho JA, et al. (2023) Reproductive-Toxicity-Related Endpoints in *C. elegans* Are Consistent with Reduced Concern for Dimethylarsinic Acid Exposure Relative to Inorganic Arsenic. *Journal of developmental biology*, 11(2).