

Resource Summary Report

Generated by [FDI Lab - SciCrunch.org](https://fdi-lab.sci-crunch.org) on Apr 21, 2025

OP50

RRID:WB-STRAIN:WBStrain00041969

Type: Organism

Proper Citation

RRID:WB-STRAIN:WBStrain00041969

Organism Information

URL: <http://www.wormbase.org/db/get?name=WBStrain00041969>

Proper Citation: RRID:WB-STRAIN:WBStrain00041969

Description: Escherichia coli with name E. coli. from WB.

Species: Escherichia coli

Synonyms: E. coli.

Notes: Bacteria. Uracil auxotroph. E. coli B. Biosafety Level: BSL-1."Non-elegans Strain"|"Reference WBPaper00055815 added based on published strain data identified by Textpresso literature search."|"Reference WBPaper00056729 added based on published strain data identified by Textpresso literature search."|"Reference WBPaper00056839 added based on published strain data identified by Textpresso literature search."|"Reference WBPaper00056919 added based on published strain data identified by Textpresso literature search."|"Reference WBPaper00057117 added based on published strain data identified by Textpresso literature search."|"Reference WBPaper00057289 added based on published strain data identified by Textpresso literature search."|"Reference WBPaper00058621 added based on published strain data identified by Textpresso literature search."|"Reference WBPaper00058626 added based on published strain data identified by Textpresso literature search."|"Reference WBPaper00058640 added based on published strain data identified by Textpresso literature search."|"Reference WBPaper00058717 added based on published strain data identified by Textpresso literature search."|"Reference WBPaper00058750 added based on published strain data identified by Textpresso literature search."|"Reference WBPaper00058810 added based on published strain data identified by Textpresso literature search."|"Reference WBPaper00058832 added based on published strain data identified by Textpresso literature search."|"Reference WBPaper00058851 added based on published strain data identified by Textpresso literature search."|"Reference WBPaper00058995 added

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WBPaper00062146 paper added based on AFP_Strain data."

Affected Gene: EMPTY

Genomic Alteration: EMPTY

Catalog Number: WB-STRAIN:WBStrain00041969

Database: WormBase (WB)

Database Abbreviation: WB

Availability: live

Source References:

WBPaper00004955(PMID:19270990)WBPaper00006495(PMID:15115160)WBPaper00010040(PMID:E

Alternate IDs: WB-STRAIN:OP50

Organism Name: OP50

Record Creation Time: 20230227T013736+0000

Record Last Update: 20250419T234750+0000

Ratings and Alerts

No rating or validation information has been found for OP50.

No alerts have been found for OP50.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: WormBase (WB)

Usage and Citation Metrics

We found 70 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](https://www.fdi-lab.com/SciCrunch.org).

Walker AC, et al. (2024) Identification of proteotoxic and proteoprotective bacteria that non-specifically affect proteins associated with neurodegenerative diseases. *iScience*, 27(9), 110828.

Li W, et al. (2024) Low-dose naltrexone extends healthspan and lifespan in *C. elegans* via SKN-1 activation. *iScience*, 27(6), 109949.

Wang HL, et al. (2024) A luminescent-based protocol for NAD⁺/NADH detection in *C. elegans*, mice, and human whole blood. *STAR protocols*, 5(4), 103428.

Seto R, et al. (2024) *Pseudomonas fluorescens* 15 small RNA Pfs1 mediates transgenerational epigenetic inheritance of pathogen avoidance in *C. elegans* through the Ephrin receptor VAB-1. *bioRxiv* : the preprint server for biology.

Sharma N, et al. (2024) Protocol for auxin-inducible protein degradation in *C. elegans* using different auxins and TIR1-expressing strains. *STAR protocols*, 5(3), 103133.

Park S, et al. (2024) Dopey-dependent regulation of extracellular vesicles maintains neuronal morphology. *bioRxiv* : the preprint server for biology.

Liu J, et al. (2024) Protocol for survival assay of *Caenorhabditis elegans* to *Pseudomonas aeruginosa* PA14 infection. *STAR protocols*, 5(2), 103070.

Chen Y, et al. (2024) The nematode *Caenorhabditis elegans* enhances tolerance to landfill leachate stress by increasing trehalose synthesis. *PeerJ*, 12, e17332.

Wang S, et al. (2024) Poplar Bud (*Populus*) Extraction and Chinese Propolis Counteract Oxidative Stress in *Caenorhabditis elegans* via Insulin/IGF-1 Signaling Pathway. *Antioxidants* (Basel, Switzerland), 13(7).

Stillman NH, et al. (2024) Protein mimetic 2D FAST rescues alpha synuclein aggregation mediated early and post disease Parkinson's phenotypes. *Nature communications*, 15(1), 3658.

Sirakawin C, et al. (2024) SKN-1/NRF2 upregulation by vitamin A is conserved from nematodes to mammals and is critical for lifespan extension in *Caenorhabditis elegans*. *Aging cell*, 23(3), e14064.

Tse-Kang SY, et al. (2024) Intestinal immunity in *C. elegans* is activated by pathogen effector-triggered aggregation of the guard protein TIR-1 on lysosome-related organelles. *Immunity*, 57(10), 2280.

Almutairi N, et al. (2024) Stage-specific exposure of *Caenorhabditis elegans* to cadmium identifies unique transcriptomic response cascades and an uncharacterized cadmium

responsive transcript. *Metallomics : integrated biometal science*, 16(5).

Sengupta T, et al. (2024) A natural bacterial pathogen of *C. elegans* uses a small RNA to induce transgenerational inheritance of learned avoidance. *PLoS genetics*, 20(3), e1011178.

Zytner P, et al. (2024) Selenium-Enriched *E. coli* Bacteria Mitigate the Age-Associated Degeneration of Cholinergic Neurons in *C. elegans*. *Antioxidants (Basel, Switzerland)*, 13(4).

Das P, et al. (2024) Calcineurin inhibition enhances *Caenorhabditis elegans* lifespan by defecation defects-mediated calorie restriction and nuclear hormone signaling. *eLife*, 12.

Essig YJ, et al. (2024) Juggling cadmium detoxification and zinc homeostasis: A division of labour between the two *C. elegans* metallothioneins. *Chemosphere*, 350, 141021.

Gao AW, et al. (2024) High-content phenotypic analysis of a *C. elegans* recombinant inbred population identifies genetic and molecular regulators of lifespan. *bioRxiv : the preprint server for biology*.

Yadav DK, et al. (2024) O-GlcNAc signaling increases neuron regeneration through one-carbon metabolism in *Caenorhabditis elegans*. *eLife*, 13.

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).