

Resource Summary Report

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

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 based on published strain data identified by Textpresso literature search."|"Reference WBPaper00059068 added based on published strain data

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Catalog Number: WB-STRAIN:WBStrain00041969

Database: WormBase (WB)

Database Abbreviation: WB

Availability: available

Source References: [PMID:19270990](#), [PMID:15115160](#), [PMID:15508623](#),
[PMID:15692856](#), [PMID:15862884](#), [PMID:16885605](#), [PMID:17704266](#), [PMID:18064062](#),

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[PMID:34663906](#)

Alternate IDs: WB-STRAIN:OP50, CGC_OP50

Organism Name: OP50

Record Creation Time: 20230227T013736+0000

Record Last Update: 20260725T172526+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 179 mentions in open access literature.

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

Zhu S, et al. (2025) De novo NAD⁺ synthesis is ineffective for NAD⁺ supply in axenically cultured *Caenorhabditis elegans*. *Communications biology*, 8(1), 545.

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.

Noblett N, et al. (2025) Nuclear hormone receptor regulation of PAL-1/Caudal mediates ventral nerve cord assembly in *C. elegans*. *Developmental biology*, 528, 13.

Toker IA, et al. (2025) Divergence in neuronal signaling pathways despite conserved neuronal identity among *Caenorhabditis* species. *Current biology : CB*, 35(12), 2927.

Wibisono S, et al. (2025) The GCN-2/eIF-2 γ /ATF-4 signaling pathway is involved in *C. elegans* defense against *Salmonella enterica* infection. *Virulence*, 16(1), 2580132.

Rahman SS, et al. (2025) Methionine cycle in *C. elegans* serotonergic neurons regulates diet-dependent behaviour and longevity through neuron-gut signaling. *Nature communications*, 16(1), 5118.

Jonk SM, et al. (2025) Metabolic analysis of sarcopenic muscle identifies positive modulators of longevity and healthspan in *C. elegans*. *Redox biology*, 85, 103732.

Valle-Jiménez X, et al. (2025) Phenolic Acids Commonly Found in Natural Products Modulate Protein Aggregation in *Caenorhabditis elegans* Neurodegeneration Models. *ACS omega*, 10(26), 27861.

Rao R, et al. (2025) Inhibition of the UFD-1-NPL-4 complex triggers an aberrant immune response in *Caenorhabditis elegans*. *bioRxiv : the preprint server for biology*.

Li Y, et al. (2025) Genome-wide RNAi screening in *C. elegans* reveals OXPHOS and pyrimidine synthesis pathways as PKA regulators. *Communications biology*, 8(1), 1280.

Bördén K, et al. (2025) Developing Endogenous Autophagy Reporters in *Caenorhabditis elegans* to Monitor Basal and Starvation-Induced Autophagy. *International journal of molecular sciences*, 26(20).

Dennis N, et al. (2025) A novel *C. elegans* respirometry assay using low-cost optical oxygen sensors. *Biology methods & protocols*, 10(1), bpaf072.

Gainey DP, et al. (2025) Reported transgenerational responses to *Pseudomonas aeruginosa* in *Caenorhabditis elegans* are not robust. *eLife*, 13.

Bandi S, et al. (2025) Glycosylated N⁶-Acyl Phosphoethanolamines as Bacterial Food-Dependent Signaling Molecules in *Caenorhabditis* Nematodes. *ACS bio & med chem Au*, 5(4), 602.

Ávila DS, et al. (2025) Nutritional Supplementation Benefits in *Caenorhabditis elegans* under Developmental Disruption and Stress Conditions. *ACS omega*, 10(29), 31313.

Zhou J, et al. (2025) A tubulin-MAPKKK pathway engages tubulin isotype interaction for neuroprotection. *Proceedings of the National Academy of Sciences of the United States of America*, 122(34), e2507208122.

Haque R, et al. (2025) Decoding sexual dimorphism of the sex-shared nervous system at single-neuron resolution. *Science advances*, 11(28), eadv9106.

Hochstrasser T, et al. (2025) Behavioral Changes in *Caenorhabditis elegans* After Exposure to Radial Extracorporeal Shock Waves. *Journal of clinical medicine*, 14(20).

Figueroa-Delgado PV, et al. (2025) NDR kinase SAX-1 controls dendrite branch-specific elimination during neuronal remodeling in *C. elegans*. *bioRxiv : the preprint server for biology*.

Haley JA, et al. (2025) Accept-reject decision-making revealed via a quantitative and ethological study of *C. elegans* foraging. *bioRxiv : the preprint server for biology*.