

Resource Summary Report

Generated by [ASWG](#) on Sep 5, 2026

NL5901

RRID:WB-STRAIN:WBStrain00029035

Type: Organism

Proper Citation

RRID:WB-STRAIN:WBStrain00029035

Organism Information

URL: <http://www.wormbase.org/db/get?name=WBStrain00029035>

Proper Citation: RRID:WB-STRAIN:WBStrain00029035

Description: Caenorhabditis elegans with name pkIs2386 [unc-54p::alpha-synuclein::YFP + unc-119(+)] from WB.

Species: Caenorhabditis elegans

Synonyms: pkIs2386 [unc-54p::alpha-synuclein::YFP + unc-119(+)]

Notes: pkIs2386 [unc-54p::alpha-synuclein::YFP + unc-119(+)]. YFP expression in the muscles. unc-119 was in the background, but it may have been crossed out.|"Reference WBPaper00059117 added based on published strain data identified by Textpresso literature search."|"Supplementary_genotype"|"Supplementary_genotype (Punc-54::alpha-synuclein::YFP + unc-119)"|"Supplementary_genotype pkIs2386 [unc-54p::alpha-synuclein::YFP + unc-119(+)]"|"WBStrain mapped, WBPaper00060404 added based on AFP_Strain data."|"WBStrain mapped, WBPaper00060977 added based on AFP_Strain data."|"WBStrain mapped, WBPaper00061004 added based on AFP_Strain data."|"[2022-04-11T18:09:46.653Z WBPaper324] Kill Strain: In order to recreate with genotype information"|"[2022-04-11T18:10:40.583Z WBPaper324] Ressurect Strain: Genotype: pkIs2386 [unc-54p::alpha-synuclein::YFP + unc-119(+)]"

Catalog Number: WB-STRAIN:WBStrain00029035

Database: WormBase (WB)

Database Abbreviation: WB

Availability: available

Source References: [PMID:31940482](#), [PMID:32966472](#), [PMID:32371398](#), [PMID:33178678](#), [PMID:37103980](#), [PMID:37197200](#), [PMID:37726773](#), [PMID:37957360](#),

[PMID:38253120](#), [PMID:38688913](#), [PMID:38755164](#), [PMID:38817211](#), [PMID:39133842](#), [PMID:39186478](#), [PMID:39418305](#), [PMID:39439404](#)

Alternate IDs: WB-STRAIN:NL5901, CGC_NL5901

Organism Name: NL5901

Record Creation Time: 20230227T013558+0000

Record Last Update: 20260905T115203+0000

Ratings and Alerts

No rating or validation information has been found for NL5901.

No alerts have been found for NL5901.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: WormBase (WB)

Usage and Citation Metrics

We found 16 mentions in open access literature.

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

Basellini MJ, et al. (2025) Oleuropein Aglycone, an Olive Polyphenol, Influences Alpha-Synuclein Aggregation and Exerts Neuroprotective Effects in Different Parkinson's Disease Models. *Molecular neurobiology*, 62(12), 15741.

AlOkda A, et al. (2025) Cyrene: a novel geroprotective compound that extends lifespan and healthspan in *C. elegans* and *Drosophila*. *npj aging*, 12(1), 12.

Liu N, et al. (2025) The *C. elegans* *gba-3* gene encodes a glucocerebrosidase that exacerbates α -synuclein-mediated impairments in deletion mutants. *Translational neurodegeneration*, 14(1), 9.

Gallardo-Campos M, et al. (2025) KFERQ-selective protein autophagy in *Caenorhabditis elegans* depends on LMP-1. *PloS one*, 20(9), e0330339.

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.

Li L, et al. (2024) *Dendrobium Nobile* Alcohol Extract Extends the Lifespan of *Caenorhabditis elegans* via *hsf-1* and *daf-16*. *Molecules (Basel, Switzerland)*, 29(4).

- 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.
- Promptang S, et al. (2024) 2-Butoxytetrahydrofuran, Isolated from *Holothuria scabra*, Attenuates Aggregative and Oxidative Properties of α -Synuclein and Alleviates Its Toxicity in a Transgenic *Caenorhabditis elegans* Model of Parkinson's Disease. *ACS chemical neuroscience*, 15(11), 2182.
- Snow S, et al. (2024) Neuronal CBP-1 is Required for Enhanced Body Muscle Proteostasis in Response to Reduced Translation Downstream of mTOR. *Frontiers in bioscience (Landmark edition)*, 29(7), 264.
- Schiavi A, et al. (2023) Mitochondria hormesis delays aging and associated diseases in *Caenorhabditis elegans* impacting on key ferroptosis players. *iScience*, 26(4), 106448.
- Moreno A, et al. (2023) Examining Sporadic Cancer Mutations Uncovers a Set of Genes Involved in Mitochondrial Maintenance. *Genes*, 14(5).
- Okoro NO, et al. (2023) Polysaccharides Extracted from *Dendrobium officinale* Grown in Different Environments Elicit Varying Health Benefits in *Caenorhabditis elegans*. *Nutrients*, 15(12).
- Chamoli M, et al. (2023) A drug-like molecule engages nuclear hormone receptor DAF-12/FXR to regulate mitophagy and extend lifespan. *Nature aging*, 3(12), 1529.
- Huang X, et al. (2023) PIWI-interacting RNA expression regulates pathogenesis in a *Caenorhabditis elegans* model of Lewy body disease. *Nature communications*, 14(1), 6137.
- Pandey R, et al. (2022) Towards the development of phytoextract based healthy ageing cognitive booster formulation, explored through *Caenorhabditis elegans* model. *The Nucleus : an international journal of cytology and allied topics*, 65(3), 303.
- Kitisin T, et al. (2022) Infections of *Cryptococcus* species induce degeneration of dopaminergic neurons and accumulation of α -Synuclein in *Caenorhabditis elegans*. *Frontiers in cellular and infection microbiology*, 12, 1039336.