Resource Summary Report

Generated by NIF on Aug 22, 2026

TJ356

RRID:WB-STRAIN:WBStrain00034892
Type: Organism

Proper Citation

RRID:WB-STRAIN:WBStrain00034892

Organism Information

URL: http://www.wormbase.org/db/get?name=WBStrain00034892

Proper Citation: RRID:WB-STRAIN:WBStrain00034892

Description: Caenorhabditis elegans with name zIs356 [daf-16p::daf-16a/b::GFP+rol-6(su1006)] from WB.

Species: Caenorhabditis elegans

Synonyms: zIs356 [daf-16p::daf-16a/b::GFP+rol-6(su1006)]

Notes: Alt genotype from publication : [daf-16p::daf-16a/b::GFP + rol-6(su1006)]|"Generated from papers flagged positive during the last month for data type afp_strain/other_strain."|"Mutagen:Gamma rays"|"Reference WBPaper00054805 added based on published strain data identified by Textpresso literature search."|"Reference WBPaper00057259 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 WBPaper00059256 added based on published strain data identified by Textpresso literature search."|"Supplementary_genotype (zIs356[daf-16p::daf-16a/b::GFP + rol-6(su1006)])"|"Supplementary_genotype (zIs356[daf-16p::daf-16a/b::GFP + rol-6])"|"Supplementary_genotype daf-16p::daf-16a/b::GFP zIs356 [daf-16p::daf-16a/b::GFP + rol-6(su1006)]"|"Supplementary_genotype zIs356 V [daf-16p::daf-16::gfp + rol-6(su1006)]"|"Supplementary_genotype zIs356 [daf-16p::daf-16a/b::GFP + rol-6(su1006)]"|"Supplementary_genotype [daf-16p::daf-16a/b::GFP + rol-6(su1006) II.]"|"WBStrain mapped, WBPaper00059685 added based on AFP_Strain data."|"WBStrain mapped, WBPaper00060064 added based on AFP_Strain data."|"WBStrain mapped, WBPaper00060204 added based on AFP_Strain data."|"WBStrain mapped, WBPaper00060824 added based on AFP_Strain data."|"WBStrain mapped, WBPaper00060896 added based on AFP_Strain data."|"WBStrain mapped, WBPaper00061006 added based on AFP_Strain data."|"WBStrain provided so WBPaper00049531 paper added based on AFP_Strain data."|"WBStrain provided so

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WBPaper00062146 paper added based on AFP_Strain data."|"zIs356 [daf-16p::daf-16a/b::GFP + rol-6(su1006)]. Daf-c, Rol, Fluorescent DAF-16::GFP, Age, increased resistance to heat and UV. Grows and reproduces slowly. Maintain at 20C. Integrated by gamma irradiation of extrachromosomal (Ex daf-16::GFP) line. This strain cannot be distributed to commercial organizations. This strain cannot be used for any commercial purpose or for work on human subjects. April 2005: Corrigendum: daf-16 integrates developmental and environmental inputs to mediate aging in the nematode Caenorhabditis elegans. Joshua McElwee of University College London has brought to our attention that plasmid pGP30 described in Henderson and Johnson (Current Biology 11, 1975-1980, December 2001) contains a mutation. We have confirmed the mutation in our own traces from the original sequence. Using daf-16a2 cDNA as a reference sequence (genbank accession number AF020343), pGP30 contains an A to T transversion at AF020343 position 1747:(TTCCCGATCAGCCACTGATGG(a/t)ACTATGGATGTTGATGCATTGA). This mutation results in an GAT (asp) to GTT(val) change at position 484 of the translated AF020343 sequence. The DAF-16::GFP (green fluorescent protein) protein encoded by pGP30 rescues a daf-16 null phenotype and behaves similarly to other reported DAF-16 fusion constructs (Lee et al., 2001; Lin et al., 2001). Therefore, we do not feel it alters the conclusions of the paper. We regret any inconvenience this may have caused. Samuel T. Henderson* and Thomas E. Johnson. Correspondence: johnsont@colorado.edu. Lee, R. Y., Hench, J., and Ruvkun, G. (2001). Regulation of C. elegans DAF-16 and its human

ortholog FKHRL1 by the daf-2 insulin-like signaling pathway. Curr Biol 11, 1950-1957.Lin, K., Hsin, H., Libina, N., and Kenyon, C. (2001). Regulation of the Caenorhabditis elegans longevity protein DAF-16 by insulin/IGF-1 and germline signaling. Nat Genet 28, 139-145. This strain cannot be used for any commercial purpose or for work on human subjects."|"zIs356 [daf-16p::daf-16a/b::GFP + rol-6(su1006)]. Daf-c, Rol, Fluorescent DAF-16::GFP, Age, increased resistance to heat and UV. Grows and reproduces slowly. Maintain at 20C. Integrated by gamma irradiation of extrachromosomal (Ex daf-16::GFP) line. This strain cannot be distributed to commercial organizations. This strain cannot be used for any commercial purpose or for work on human subjects. April 2005: Corrigendum: daf-16 integrates developmental and environmental inputs to mediate aging in the nematode Caenorhabditis elegans. Joshua McElwee of University College London has brought to our attention that plasmid pGP30 described in Henderson and Johnson (Current Biology 11, 1975-1980, December 2001) contains a mutation. We have confirmed the mutation in our own traces from the original sequence. Using daf-16a2 cDNA as a reference sequence (genbank accession number AF020343), pGP30 contains an A to T transversion at AF020343 position 1747:(TTCCCGATCAGCCACTGATGG(a/t)ACTATGGATGTTGATGCATTGA). This mutation results in an GAT (asp) to GTT(val) change at position 484 of the translated AF020343 sequence. The DAF-16::GFP (green fluorescent protein) protein encoded by pGP30 rescues a daf-16 null phenotype and behaves similarly to other reported DAF-16 fusion constructs (Lee et al., 2001; Lin et al., 2001). Therefore, we do not feel it alters the conclusions of the paper. We regret any inconvenience this may have caused. Samuel T. Henderson* and Thomas E. Johnson?. ?Correspondence: johnsont@colorado.edu. Lee, R. Y., Hench, J., and Ruvkun, G. (2001). Regulation of C. elegans DAF-16 and its human ortholog FKHRL1 by the daf-2 insulin-like signaling pathway. Curr Biol 11, 1950-1957.Lin, K., Hsin, H., Libina, N., and Kenyon, C. (2001). Regulation of the Caenorhabditis elegans longevity protein DAF-16 by insulin/IGF-1 and germline signaling. Nat Genet 28, 139-145."

Affected Gene: WBGene00000912(daf-16)|WBGene00004397(rol-6)

Genomic Alteration: WBGene00000912(daf-16), WBGene00004397(rol-6)

Catalog Number: WB-STRAIN:WBStrain00034892

Database: WormBase (WB)

Database Abbreviation: WB

Availability: available

Source References: PMID:29956725, PMID:31432005, PMID:31645584, PMID:32010481, PMID:32289633, PMID:32453327, PMID:32535316, PMID:32707947, PMID:32768194, PMID:32875367, PMID:32163353, PMID:33319173, PMID:33382195, PMID:33471780, PMID:33159585, PMID:33809299, PMID:33883621, PMID:33956916, PMID:34449775, PMID:34505574, PMID:33851304, PMID:34544019, PMID:34607947, PMID:34634043, PMID:34648748, PMID:36626986, PMID:36794357, PMID:37118502, PMID:37122724, PMID:37440595, PMID:37454110, PMID:37500972, PMID:37639584, PMID:37704756, PMID:37726773, PMID:37422249, PMID:37910615, PMID:38378098, PMID:38532074, PMID:38632209, PMID:38746662, PMID:38754743, PMID:39273603, PMID:39731224, PMID:39708289

Alternate IDs: WB-STRAIN:TJ356, CGC_TJ356

Organism Name: TJ356

Record Creation Time: 20230227T013642+0000

Record Last Update: 20260815T163246+0000

Ratings and Alerts

No rating or validation information has been found for TJ356.

No alerts have been found for TJ356.

Data and Source Information

Source: Integrated Animals

Source Database: WormBase (WB)

Usage and Citation Metrics

We found 24 mentions in open access literature.

Listed below are recent publications. The full list is available at NIF .

Taipe Huisa AJ, et al. (2026) Comparative analysis of nanosilver toxicity in C. elegans: influence of exposure media on accumulation, physiological and biochemical effects. Environmental science and pollution research international, 33(4), 1365.

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

Chaturbedi A, et al. (2025) Different gametogenesis states uniquely impact longevity in Caenorhabditis elegans. Nature communications, 16(1), 9300.

Demirbas B, et al. (2025) Body-wide synchronization of insulin-signaling dependent DAF-16/FOXO nuclear translocation pulses correlated with C. elegans growth. Nature communications, 16(1), 11273.

Krishna MM, et al. (2025) Epidermal Collagen Reduction Drives Selective Aspects of Aging in Sensory Neurons. Aging cell, 24(4), e14459.

Maldonado CAO, et al. (2025) Microplastic-Mediated Delivery of Di-butyl Phthalate Alters C. elegans Lifespan and Reproductive Fidelity. Microplastics (Basel, Switzerland), 4(4).

Yu X, et al. (2024) 4,4'-methylenediphenol reduces A?-induced toxicity in a Caenorhabditis elegans model of Alzheimer's disease. Frontiers in aging neuroscience, 16, 1393721.

Navarro-Hortal MD, et al. (2024) In Vitro and In Vivo Insights into a Broccoli Byproduct as a Healthy Ingredient for the Management of Alzheimer's Disease and Aging through

Redox Biology. Journal of agricultural and food chemistry, 72(10), 5197.

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).

Sun M, et al. (2024) TSG Extends the Longevity of Caenorhabditis elegans by Targeting the DAF-16/SKN-1/SIR-2.1-Mediated Mitochondrial Quality Control Process. Antioxidants (Basel, Switzerland), 13(9).

Yu X, et al. (2024) P-hydroxybenzaldehyde protects Caenorhabditis elegans from oxidative stress and ?-amyloid toxicity. Frontiers in aging neuroscience, 16, 1414956.

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).

Li H, et al. (2024) Dimethylsulfoniopropionate (DMSP) Increases Longevity and Mitochondrial Function in Caenorhabditis elegans: Implications for the Role of the Global Sulfur Cycle in Terrestrial Ecosystems. Environment & health (Washington, D.C.), 2(8), 572.

Di Bernardo M, et al. (2024) SHC-3: a previously unidentified C. elegans Shc family member functions in the insulin-like signaling pathway to enhance survival during L1 arrest. Genetics, 228(2).

Ullah I, et al. (2024) Nicotine-mediated therapy for Parkinson's disease in transgenic Caenorhabditis elegans model. Frontiers in aging neuroscience, 16, 1358141.

Zhu H, et al. (2024) Loss of the ceramide synthase HYL-2 from Caenorhabditis elegans impairs stress responses and alters sphingolipid composition. The Journal of biological chemistry, 300(6), 107320.

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.

De-Souza EA, et al. (2023) Olfactory chemosensation extends lifespan through TGF-? signaling and UPR activation. Nature aging, 3(8), 938.

Wang S, et al. (2023) APPA Increases Lifespan and Stress Resistance via Lipid Metabolism and Insulin/IGF-1 Signal Pathway in Caenorhabditis elegans. International journal of molecular sciences, 24(18).

Traa A, et al. (2023) Endosomal trafficking protein TBC-2 modulates stress resistance and lifespan through DAF-16-dependent and independent mechanisms. Aging cell, 22(3), e13762.