

# Resource Summary Report

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

## CL2355

RRID:WB-STRAIN:WBStrain00005106

Type: Organism

### Proper Citation

RRID:WB-STRAIN:WBStrain00005106

### Organism Information

**URL:** <http://www.wormbase.org/db/get?name=WBStrain00005106>

**Proper Citation:** RRID:WB-STRAIN:WBStrain00005106

**Description:** Caenorhabditis elegans with name EMPTY from WB.

**Species:** Caenorhabditis elegans

**Synonyms:** EMPTY

**Notes:** Associated protein: Human A peptide|dvIs50 [pCL45 (snb-1::Abeta 1-42::3' UTR(long) + mtl-2::GFP) I. Maintain at 16C. Pan-neuronal expresion of human Abeta peptide. Constitutive intestinal expression of GFP from marker transgene. Strain shows deficits in chemotaxis, associative learning, and thrashing in liquid. Strain also has incomplete sterility due to germline proliferation defects and embryonic lethality. Maintain at 16 C to reduce selection against transgene, although this does not alter the partial sterility. Reference: Wu Y., et al. J Neurosci. 2006 Dec 13;26(50):13102-13. [NOTE: The temperature-sensitive allele cc546 causes an M1957L change in SMG-1. The lesion is an atg>ttg transversion in exon 35. Flanking sequences follow with the mutation site indicated with a capital A: ttggtggtcgggtacaaaacgatattcaaga tcactggcagtcagtagtAtggttgatcagtttaggactcggatgatcg acatttgacaatttattg The lesion is detectable via SNP-snip with the mutation causing loss of an MslI site. Primers are for a 323 bp product. Digest with MslI to 86+237 in the wild type, uncut as 323 in the mutant. DJR701(f): CAGTCGTGAGCTTTGGATGCGTGC DJR702(r): TCGGGGATACGCAGATTCTTTCCC. Pedone ... Reiner G3 (2021).]"Mutagen:Gamma rays]"Transgene expression: Inducible pan-neuronal + intestine (marker)"[2020-08-03T20:49:03.516Z WBPperson324] Ressurrect Strain: Genotype: smg-1(cc546); pCL45 [Psnb-1::human Amyloid beta 1-42::3' UTR (long); Pmtl-2::GFP]"

**Affected Gene:** WBGene00004879(smg-1)

**Genomic Alteration:** WBGene00004879(smg-1)

**Catalog Number:** WB-STRAIN:WBStrain00005106

**Database:** WormBase (WB)

**Database Abbreviation:** WB

**Availability:** available

**Source References:** [PMID:31797327](#), [PMID:32966472](#), [PMID:33466350](#), [PMID:35018947](#), [PMID:37549461](#), [PMID:38274404](#), [PMID:38500791](#), [PMID:38983916](#), [PMID:39212733](#)

**Alternate IDs:** WB-STRAIN:CL2355, CGC\_CL2355

**Organism Name:** CL2355

**Record Creation Time:** 20230227T013257+0000

**Record Last Update:** 20260725T171702+0000

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## Ratings and Alerts

No rating or validation information has been found for CL2355.

No alerts have been found for CL2355.

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## Data and Source Information

**Source:** [Integrated Animals](#)

**Source Database:** WormBase (WB)

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## Usage and Citation Metrics

We found 7 mentions in open access literature.

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

Huang W, et al. (2025) Lobetyolin, an anti-AD factor from the diet campanulaceae source, metabolism regulation and target exploration. Natural products and bioprospecting, 15(1), 64.

Seira Curto J, et al. (2025) Exogenous prion-like proteins and their potential to trigger cognitive dysfunction. Molecular systems biology, 21(8), 1004.

AlOkda A, et al. (2025) Cyrene: A Novel Geroprotective Compound that Extends Lifespan and Healthspan in C. elegans and Drosophila. bioRxiv : the preprint server for biology.

Wen YP, et al. (2024) Exploring the therapeutic potential of Nelumbo nucifera leaf extract against amyloid-beta-induced toxicity in the Caenorhabditis elegans model of Alzheimer's disease. Frontiers in pharmacology, 15, 1408031.

Balasubramaniam M, et al. (2024) Rescue of ApoE4-related lysosomal autophagic failure in Alzheimer's disease by targeted small molecules. *Communications biology*, 7(1), 60.

Ayuda-Durán B, et al. (2024) Insights into the Neuroprotective Potential of Epicatechin: Effects against A $\beta$ -Induced Toxicity in *Caenorhabditis elegans*. *Antioxidants* (Basel, Switzerland), 13(1).

Peng W, et al. (2024) DMT1 knockout abolishes ferroptosis induced mitochondrial dysfunction in *C. elegans* amyloid  $\beta$  proteotoxicity. *bioRxiv* : the preprint server for biology.