

Resource Summary Report

Generated by [RRID](#) on Aug 20, 2026

KG#203

RRID:Addgene_110880

Type: Plasmid

Proper Citation

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Plasmid Information

URL: <http://www.addgene.org/110880>

Proper Citation: RRID:Addgene_110880

Insert Name: rab-3 promoter

Organism: Caenorhabditis elegans

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:16624912](#)

Vector Backbone Description: Backbone Size:2617; Vector Backbone:pUC; Vector Types:Bacterial Expression; Bacterial Resistance:Ampicillin

Comments: Used StrataScript Reverse Transcriptase and a primer engineered with a restriction site to make the full length pde-4d cDNA (2025 bp). We then nicked the duplexed RNA with RNase H and synthesize the 2nd strand of cDNA using E. coli DNA Polymerase I, which can do nick translation. The DNA Pol I uses the nicked RNA as primers to synthesize the second strand (it chews up the RNA in front of it and replaces with DNA). We then used Accuprime Pfx and primers engineered with restriction sites to amplify and clone the cDNA into Nhe I/ Age I cut KG#59 (rab-3:: expression vector; 4.9 Kb). Transformed into XL1-Blue electrocompetent cells. Qiagen minipreped 2 clones to found those with correct insert, then submitted the 2 clones for sequence. Choose one clone that had correct sequence and made glycerol stock. Features of the expression construct: This expression construct has a promoter (rab-3) that will drive expression of the cDNA throughout the nervous system. This construct includes only the coding region of pde-4d, and the sequence is taken from the Wormbase WS134 release, gene designation R153.1d. This 'd' isoform seems to be the most common splice variant. The sequence AAAA is engineered just after the 5' restriction site and just before the initiator ATG. An AT immediately follows the TAA stop codon for a consensus stop site. Three introns (all located in untranslated regions of the vector) are present to give stable and uniform expression (1 in the 5' UTR, 1 just upstream of the unc-54 3' end, and 1 in the

unc-54 3' end sequence). The vector includes the unc-54 3' untranslated end containing a poly A addition signal to stop transcription and provide a 3' UTR for the transcript. The vector also contains a "decoy" (see 1995 vector kit documentation) upstream of the promoter to reduce background expression in the gut and pharynx from read-through transcription.

Plasmid Name: KG#203

Record Creation Time: 20220422T221539+0000

Record Last Update: 20260815T080144+0000

Ratings and Alerts

No rating or validation information has been found for KG#203.

No alerts have been found for KG#203.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 2 mentions in open access literature.

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

Fernandez-Abascal J, et al. (2022) A glial CIC Cl- channel mediates nose touch responses in *C.??elegans*. Neuron, 110(3), 470.

Traa A, et al. (2021) Identification of Novel Therapeutic Targets for Polyglutamine Diseases That Target Mitochondrial Fragmentation. International journal of molecular sciences, 22(24).