

Resource Summary Report

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

KG#205

RRID:Addgene_110881

Type: Plasmid

Proper Citation

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Plasmid Information

URL: <http://www.addgene.org/110881>

Proper Citation: RRID:Addgene_110881

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: Started with KG#203 (contains pde-4d(+) coding region cDNA in rab-3:: expression vector) and use the QuikChange site directed mutagenesis method to introduce the D448N mutation. The mutation changes codon 448 of pde-4d from GAT(Asp) to AAT (Asn) (HDVDH to HNVDH). Minipreped 4 clones and chose 2 with the correct size insert to sequence. Sequenced the entire insert of both clones, and kept one clone that has the correct mutation, but no other mutations. After sequencing, this insert was "re-cloned" into a fresh rab-3:: expression vector to ensure that there are no other vector mutations that could affect its performance or expression in transgenic worms. 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 2025 bp coding region of pde-4d (and contains the D448N mutation), and the sequence is taken from the Wormbase WS134 release, gene designation R153.1d (the d isoform appears to be the most common based on analysis of EST cDNAs). 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#205

Record Creation Time: 20220422T221539+0000

Record Last Update: 20260905T074416+0000

Ratings and Alerts

No rating or validation information has been found for KG#205.

No alerts have been found for KG#205.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We have not found any literature mentions for this resource.