# Resource Summary Report

Generated by T1D on Sep 17, 2026

## KG#94

RRID:Addgene_110931
Type: Plasmid

### Proper Citation

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### Plasmid Information

**URL:** http://www.addgene.org/110931

**Proper Citation:** RRID:Addgene_110931

**Insert Name:** unc-17 promoter

**Organism:** Caenorhabditis elegans

**Bacterial Resistance:** Ampicillin

**Defining Citation:** PMID:17942708

**Vector Backbone Description:** Backbone Size:2632; Vector Backbone:pUC; Vector Types:Bacterial Expression; Bacterial Resistance:Ampicillin

**Comments:** Unique multi-cloning sites: Nhe I, Sal I, Kpn I/ Age I/ Eco RV, Bgl II Used Apa I/ Msc I to cut out the ~1900 bp GFP/ 3' control region from RM#349p, leaving the 5900 bp vector fragment containing the unc-17 full promoter + remaining vector sequences. To this vector fragment, we ligated the 1079 bp Apa I/ Msc I fragment cut from pPD96.52 (C. elegans body wall muscle expression vector). Picked 6 colonies for minipreps. Chose 1 clone with correct size insert and made glycerol stock. Features of the expression construct: This is a C. elegans expression vector with the unc-17 3.2 Kb promoter + a large MCS for cloning in cDNAs. Includes cha-1/unc-17 upstream region from Sna-1 (=Bst1107 I = GTA/TAC) down to first half of the 66 bp first exon (which is common to unc-17 and cha-1 transcripts but is not translated). Includes beta site so that expression occurs in most cholinergic cells. Expression still missing from VC's and some cholinergic head and tail neurons. In this construct the GFP/ 3' control region of RM#349p is replaced with the MCS II + 3' control region of pPD96.52. This includes the unc-54 3' end including the poly A addition signal, and 3 introns (1 in 5' UTR, 1 just upstream of the unc-54 3' end, and 1 inserted in the unc-54 3' end). These introns help provide more uniform and robust expression, especially if you are expressing a cDNA with no introns as opposed to a gene with introns. Note: this vector can be converted to a vector that fuses GFP, YFP, or CFP onto the C-terminus of the protein as follows: Remove the ~1000 bp (Kpn I or Age I) +

(Spe I or BsiW I [expensive, 55 C cutter with 50% activity at 37 C; heat inactivate 80 C] or Apa I) fragment containing the unc-54 3’ control region from this plasmid and replace it with the ~1800 bp like-digested fragment containing 3-intron S65C GFP (see pPD94.81 in Fire Lab plasmids), YFP (see pPD136.64 in Fire Lab plasmids) or CFP (see pPD136.61 in Fire Lab plasmids) + the unc-54 3’ UTR and control region. Note if Spe I is used to cut these Fire Lab vectors, you get 3 bands: 1100, 1800, and 4000 (total size 6.9 Kb). The 1800 bp band is the XFP-containing band. For C-terminal fusions, remember to leave the stop codon off of the upstream protein. For the above-mentioned Fire Lab vectors, the reading frame for the downstream XFP relative to the Kpn I and Age I sites is as follows (triplets are the reading frame codons): Kpn I G GTA CCG GT Age I Alternatively, use Gibson Assembly/ NEBuilder to insert any genetically encoded fluorescent protein at the N- or C-terminus of your protein.

**Plasmid Name:** KG#94

**Record Creation Time:** 20220422T221540+0000

**Record Last Update:** 20260912T091506+0000

## Ratings and Alerts

No rating or validation information has been found for KG#94.

No alerts have been found for KG#94.

## Data and Source Information

**Source:** Addgene

## Usage and Citation Metrics

We have not found any literature mentions for this resource.