

Resource Summary Report

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

pZY101

RRID:Addgene_73932

Type: Plasmid

Proper Citation

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Plasmid Information

URL: <http://www.addgene.org/73932>

Proper Citation: RRID:Addgene_73932

Insert Name: bar

Organism: Synthetic

Bacterial Resistance: Spectinomycin

Defining Citation: [PMID:15034747](#)

Vector Backbone Description: Backbone Size:7132; Vector Backbone:pPZP201; Vector Types:Plant Expression; Bacterial Resistance:Spectinomycin

Comments: This vector is suitable for hpRNA-mediated gene silencing in tissue (seed) specific manner. Please see the Plant Transformation Core Facility website for more information on using this plasmid: <http://plantsci.missouri.edu/muptycf/pzy101.html> The vector has following features: 1. It has two replicate origins that allow to replicate in both *E. coli* and *Agrobacterium tumefaciens* cells (at higher copy numbers). 2. It also has a bom site that allows you to use tri-parental mating to mobilize the vector to *Agrobacterium* cells. 3. The *aadA* locus confers Spectinomycin (100 mg/L) or streptomycin (100 mg/L) resistance and thus enable to use either or both of these two antibiotics for the vector selection. 4. The multiple cloning site (MCS) adjacent to the double CaMV35S promoter will allow you to insert your cassette. This CaMV35S promoter is used to drive the bar ORF and, therefore, is not used in front to drive your gene of interest. You need to assemble your own expression cassette including promoter, gene coding sequence, and terminator, and then insert to anywhere between Hind III and EcoR I within the MCS. Special notes: 1. Insert your gene expression cassette in such a way that your promoter is adjacent to the promoter driving the bar gene selectable marker. This is to prevent transcription read-through from your gene expression cassette. 2. In order to use the EcoR I site within the MCS, a minimal ratio of this enzyme versus DNA is recommended to avoid star activity. When HindIII and EcoRI are in combined use, even less of each

enzyme is required, and reaction should be conducted in a large volume to avoid excessive enzymatic activity.

Plasmid Name: pZY101

Record Creation Time: 20220422T222452+0000

Record Last Update: 20260905T080058+0000

Ratings and Alerts

No rating or validation information has been found for pZY101.

No alerts have been found for pZY101.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We have not found any literature mentions for this resource.