

Resource Summary Report

Generated by [NIF](#) on Aug 29, 2026

pAGM4723

RRID:Addgene_48015

Type: Plasmid

Proper Citation

RRID:Addgene_48015

Plasmid Information

URL: <http://www.addgene.org/48015>

Proper Citation: RRID:Addgene_48015

Bacterial Resistance: Kanamycin

Defining Citation: [PMID:21364738](#)

Vector Backbone Description: Backbone Marker:self-made; Backbone Size:4824; Vector Backbone:pAGM4351; Vector Types:Unspecified; Bacterial Resistance:Kanamycin

Comments: PLEASE NOTE- It has recently come to light that plasmid pAGM4723 lacks a complete overdrive sequence at the right border. This can cause incomplete TDNA insertion events and can give a higher incidence of vector backbone transfer events due to transfer initiating at the left border. Level 2 cloning vector, replicates in E.coli and Agrobacterium, binary vector for Agrobacterium T-DNA delivery to plant cells. Please note that bacterial colonies for this plasmid often appear red in color because the plasmid contains a red color selectable marker (CRed--an artificial bacterial operon responsible for canthaxanthin biosynthesis).

Plasmid Name: pAGM4723

Record Creation Time: 20220422T222247+0000

Record Last Update: 20260829T080612+0000

Ratings and Alerts

No rating or validation information has been found for pAGM4723.

No alerts have been found for pAGM4723.

Data and Source Information

Usage and Citation Metrics

We found 30 mentions in open access literature.

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

Singh DK, et al. (2026) Cohesin and its regulation promote monopolar kinetochore orientation at meiosis I in Arabidopsis. Current biology : CB, 36(8), 1994.

Yoshimi Y, et al. (2025) Glucomannan engineering highlights roles of galactosyl modification in fine-tuning cellulose-glucomannan interaction in Arabidopsis cell walls. Nature communications, 16(1), 1235.

Dickinson PJ, et al. (2025) A transcription factor module mediating C2 photosynthesis in the Brassicaceae. EMBO reports, 26(12), 3024.

Miller CN, et al. (2025) A single-nuclei transcriptome census of the Arabidopsis maturing root identifies that MYB67 controls phellex cell maturation. Developmental cell, 60(9), 1377.

Kunta S, et al. (2025) Species-specific PHYTOCHROME-INTERACTING FACTOR utilization in the plant morphogenetic response to environmental stimuli. The Plant cell, 37(5).

Perk EA, et al. (2024) CRISPR-Cas9 Protocol for Efficient Gene Knockout and Transgene-free Plant Generation. Bio-protocol, 14(11), e5012.

Kerwin RE, et al. (2024) Tomato root specialized metabolites evolved through gene duplication and regulatory divergence within a biosynthetic gene cluster. Science advances, 10(17), eadn3991.

Procko C, et al. (2023) Mutational analysis of mechanosensitive ion channels in the carnivorous Venus flytrap plant. Current biology : CB, 33(15), 3257.

Nourozi M, et al. (2023) CRISPR/Cas StNRL1 gene knockout increases resistance to late blight and susceptibility to early blight in potato. Frontiers in plant science, 14, 1278127.

Holden S, et al. (2022) A lineage-specific Exo70 is required for receptor kinase-mediated immunity in barley. Science advances, 8(27), eabn7258.

Dong Y, et al. (2022) An optimized protocol to assess SUMOylation in the plant Capsella rubella using two-component DEX-inducible transformants. STAR protocols, 3(1), 101197.

Vu MH, et al. (2022) ROS-mediated plasmodesmal regulation requires a network of an Arabidopsis receptor-like kinase, calmodulin-like proteins, and callose synthases. Frontiers in plant science, 13, 1107224.

Yang C, et al. (2021) The scarecrow-like transcription factor SISCL3 regulates volatile terpene biosynthesis and glandular trichome size in tomato (Solanum lycopersicum). The

Plant journal : for cell and molecular biology, 107(4), 1102.

Ackerman-Lavert M, et al. (2021) Auxin requirements for a meristematic state in roots depend on a dual brassinosteroid function. Current biology : CB, 31(20), 4462.

Rossmann S, et al. (2020) Mutations in the miR396 binding site of the growth-regulating factor gene VvGRF4 modulate inflorescence architecture in grapevine. The Plant journal : for cell and molecular biology, 101(5), 1234.

Kuhn A, et al. (2020) Direct ETTIN-auxin interaction controls chromatin states in gynoecium development. eLife, 9.

Alvim Kamei CL, et al. (2020) CRISPR/Cas9-Mediated Mutagenesis of RCO in Cardamine hirsuta. Plants (Basel, Switzerland), 9(2).

Kourelis J, et al. (2020) Evolution of a guarded decoy protease and its receptor in solanaceous plants. Nature communications, 11(1), 4393.

Fan P, et al. (2020) Evolution of a plant gene cluster in Solanaceae and emergence of metabolic diversity. eLife, 9.

Israeli A, et al. (2019) Multiple Auxin-Response Regulators Enable Stability and Variability in Leaf Development. Current biology : CB, 29(11), 1746.