

Resource Summary Report

Generated by [RRID](#) on Aug 17, 2026

AICSDP-49: MYL2-mEGFP

RRID:Addgene_114414

Type: Plasmid

Proper Citation

RRID:Addgene_114414

Plasmid Information

URL: <http://www.addgene.org/114414>

Proper Citation: RRID:Addgene_114414

Insert Name: MYL2 Homology Arms with linker-mEGFP and Cas9-excisable selection cassette

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:30956114](#)

Vector Backbone Description: Vector Backbone:pUC57; Vector Types:Mammalian Expression, CRISPR, Donor Template; Bacterial Resistance:Ampicillin

Comments: This plasmid has been used with locus-specific CRISPR/Cas9 in a two-step editing process to add a mEGFP tag to the C-terminus of human MYL2 in WTC human induced pluripotent stem cells by the Allen Institute for Cell Science. After initial HDR, stable expression of CAGGS-driven mCherry will indicate cells with integrated donor sequence. This selection cassette is designed to be removed with subsequent CRISPR/Cas9-mediated excision as previously described (<https://doi.org/10.1101/342881>). A linker of 3-21 amino acids will be produced after excision. To enrich for edited cells, see our protocol for fluorescence-assisted cell sorting and subcloning of hiPSCs (<https://www.allencell.org/instructional-videos-and-tutorials-for-cell-methods.html>). Further, we recommend PCR-based assays for identifying precisely edited clones as previously described (<https://www.molbiolcell.org/doi/abs/10.1091/mbc.e17-03-0209>). For more information on the entire plasmid collection, please see <https://www.addgene.org/allen-institute-cell-science/>. Please visit <https://www.biorxiv.org/content/early/2018/06/09/342881> for the bioRxiv preprint.

Plasmid Name: AICSDP-49: MYL2-mEGFP

Relevant Mutation: homology arms contain point mutations to disrupt crRNA binding sites used

Record Creation Time: 20220422T221559+0000

Record Last Update: 20260815T080222+0000

Ratings and Alerts

No rating or validation information has been found for AICSDP-49: MYL2-mEGFP.

No alerts have been found for AICSDP-49: MYL2-mEGFP.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We have not found any literature mentions for this resource.