

Resource Summary Report

Generated by [RRID](#) on Aug 23, 2026

AICSDP-42:AAVS1-mTagRFPT-CAAX

RRID:Addgene_107580

Type: Plasmid

Proper Citation

RRID:Addgene_107580

Plasmid Information

URL: <http://www.addgene.org/107580>

Proper Citation: RRID:Addgene_107580

Insert Name: AAVS1 Homology Arms with CAGGS-driven mTagRFPT-CAAX

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

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 to insert a CAGGS-mTagRFPT-CAAX at the AAVS1 safe harbor locus in WTC human induced pluripotent stem cells by the Allen Institute for Cell Science. After insertion of the reporter using this donor template plasmid and CRISPR/Cas9 reagents, transfected cells may exhibit varying intensity levels of fluorescence, likely due to editing precision. To obtain cells of uniform intensity levels, see our protocol for fluorescence-assisted cell sorting and subcloning of transfected cells (<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/>.

Plasmid Name: AICSDP-42:AAVS1-mTagRFPT-CAAX

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

Record Creation Time: 20220422T221522+0000

Record Last Update: 20260815T080111+0000

Ratings and Alerts

No rating or validation information has been found for AICSDP-42:AAVS1-mTagRFPT-CAAX.

No alerts have been found for AICSDP-42:AAVS1-mTagRFPT-CAAX.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 4 mentions in open access literature.

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

McIntyre ABR, et al. (2025) Phosphorylation of a nuclear condensate regulates cohesion and mRNA retention. Nature communications, 16(1), 390.

Hayes BH, et al. (2023) Confinement plus myosin-II suppression maximizes heritable loss of chromosomes, as revealed by live-cell ChReporters. Journal of cell science, 136(11).

Genuth NR, et al. (2022) A stem cell roadmap of ribosome heterogeneity reveals a function for RPL10A in mesoderm production. Nature communications, 13(1), 5491.

Sun D, et al. (2021) A functional genetic toolbox for human tissue-derived organoids. eLife, 10.