

Resource Summary Report

Generated by [NIF](#) on Jul 31, 2026

AICSDP-57: SMC1A-mEGFP

RRID:Addgene_114406

Type: Plasmid

Proper Citation

RRID:Addgene_114406

Plasmid Information

URL: <http://www.addgene.org/114406>

Proper Citation: RRID:Addgene_114406

Insert Name: SMC1A Homology Arms with linker-mEGFP

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 add a mEGFP tag to the C-terminus of human SMC1A in WTC human induced pluripotent stem cells by the Allen Institute for Cell Science. Linker (AA) sequence: LSSSGPSGS. After protein tagging 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-57: SMC1A-mEGFP

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

Record Creation Time: 20220422T221559+0000

Record Last Update: 20260725T073538+0000

Ratings and Alerts

No rating or validation information has been found for AICSDP-57: SMC1A-mEGFP.

No alerts have been found for AICSDP-57: SMC1A-mEGFP.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 2 mentions in open access literature.

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

Sen Gupta A, et al. (2023) Defining a core configuration for human centromeres during mitosis. Nature communications, 14(1), 7947.

Wienert B, et al. (2020) Timed inhibition of CDC7 increases CRISPR-Cas9 mediated templated repair. Nature communications, 11(1), 2109.