

Resource Summary Report

Generated by [NIF](#) on Aug 1, 2026

Human genome-wide lentiviral CRISPR gRNA library version 1

RRID:Addgene_67989

Type: Plasmid

Proper Citation

RRID:Addgene_67989

Plasmid Information

URL: <http://www.addgene.org/67989>

Proper Citation: RRID:Addgene_67989

Insert Name: U6gRNA cassette, PGKpuro2ABFP cassette, WPRE

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:27760321](#)

Vector Backbone Description: Backbone Size:5783; Vector Backbone:pKLV2 lentiviral vector; Vector Types:Lentiviral, CRISPR; Bacterial Resistance:Ampicillin

Comments: This library consists of 90,709 guide sequences targeting a total of 18,010 human genes. For more information, please see the associated article. The library is supplied as 50 ul of DNA at 20 ng/ul. The backbone of this library is Plasmid 67974: pKLV2-U6gRNA5(BbsI)-PGKpuro2ABFP-W

Plasmid Name: Human genome-wide lentiviral CRISPR gRNA library version 1

Relevant Mutation: Deleted BbsI site within WPRE

Record Creation Time: 20220422T222424+0000

Record Last Update: 20260801T081657+0000

Ratings and Alerts

No rating or validation information has been found for Human genome-wide lentiviral CRISPR gRNA library version 1.

No alerts have been found for Human genome-wide lentiviral CRISPR gRNA library version 1.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 26 mentions in open access literature.

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

Cutano V, et al. (2025) The interplay between FOXO3 and FOXM1 influences sensitivity to AKT inhibition in PIK3CA and PIK3CA/PTEN altered estrogen receptor positive breast cancer. NPJ breast cancer, 11(1), 36.

Otero-Rosales M, et al. (2025) CDK7-targeted therapy effectively disrupts cell cycle progression and oncogenic signaling in head and neck cancer. Signal transduction and targeted therapy, 10(1), 363.

Yee PS, et al. (2025) Interferon-Inducible ADAR1 p150 Is Essential for the Survival of Oral Squamous Cell Carcinoma. Molecular carcinogenesis, 64(6), 1066.

Demetriou P, et al. (2025) CD2 costimulation strength: A key regulator of T cell function and anti-tumor immunity that is epigenetically regulated. iScience, 28(12), 113977.

Stewart ML, et al. (2025) CDK4/6 inhibition overcomes venetoclax resistance mechanisms with enhanced combination activity in acute myeloid leukemia. Cell reports. Medicine, 102526.

Iannuzzi RM, et al. (2024) Benchmark Software and Data for Evaluating CRISPR-Cas9 Experimental Pipelines Through the Assessment of a Calibration Screen. The CRISPR journal, 7(6), 355.

Chan CWF, et al. (2024) High-throughput screening of genetic and cellular drivers of syncytium formation induced by the spike protein of SARS-CoV-2. Nature biomedical engineering, 8(3), 291.

Sharma S, et al. (2024) A high-throughput two-cell assay for interrogating inhibitory signaling pathways in T cells. Life science alliance, 7(3).

Zhang L, et al. (2024) SOD1 is a synthetic lethal target in PPM1D-mutant leukemia cells. bioRxiv : the preprint server for biology.

Sakai M, et al. (2024) Genome-scale CRISPR-Cas9 screen identifies host factors as potential therapeutic targets for SARS-CoV-2 infection. iScience, 27(8), 110475.

Modak RV, et al. (2024) Targeting CCL2/CCR2 Signaling Overcomes MEK Inhibitor Resistance in Acute Myeloid Leukemia. *Clinical cancer research : an official journal of the American Association for Cancer Research*, 30(10), 2245.

Osia B, et al. (2023) RAD52 and ERCC6L/PICH have a compensatory relationship for genome stability in mitosis. *bioRxiv : the preprint server for biology*.

Lalonde ME, et al. (2023) Genome-wide CRISPR screens identify ferroptosis as a novel therapeutic vulnerability in acute lymphoblastic leukemia. *Haematologica*, 108(2), 382.

Eide CA, et al. (2023) Clinical Correlates of Venetoclax-Based Combination Sensitivities to Augment Acute Myeloid Leukemia Therapy. *Blood cancer discovery*, 4(6), 452.

Zelceski A, et al. (2023) MND1 and PSMC3IP control PARP inhibitor sensitivity in mitotic cells. *Cell reports*, 42(5), 112484.

Mamedov MR, et al. (2023) CRISPR screens decode cancer cell pathways that trigger ?? T cell detection. *Nature*, 621(7977), 188.

Damnerisawad A, et al. (2022) Genome-wide CRISPR screen identifies regulators of MAPK and MTOR pathways mediating sorafenib resistance in acute myeloid leukemia. *Haematologica*, 107(1), 77.

Shi X, et al. (2021) Nuclear NAD⁺ homeostasis governed by NMNAT1 prevents apoptosis of acute myeloid leukemia stem cells. *Science advances*, 7(30).

Supper E, et al. (2021) Cut-like homeobox 1 (CUX1) tumor suppressor gene haploinsufficiency induces apoptosis evasion to sustain myeloid leukemia. *Nature communications*, 12(1), 2482.

Romine KA, et al. (2021) Monocytic differentiation and AHR signaling as Primary Nodes of BET Inhibitor Response in Acute Myeloid Leukemia. *Blood cancer discovery*, 2(5), 518.