

Resource Summary Report

Generated by [PRECISE-TBI](#) on Aug 1, 2026

Off-Spotter

RRID:SCR_015739

Type: Tool

Proper Citation

Off-Spotter (RRID:SCR_015739)

Resource Information

URL: <https://cm.jefferson.edu/Off-Spotter/>

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Description: Web application that identifies genomic instances for a given combination of gRNA(s), PAM, number of mismatches, and seed. This tool is limited to a single 1,000 nucleotides sequence or fewer than twenty CR-separated 20-mers.

Synonyms: Off-Spotter: tool for CRISPR/Cas design, Off-spotter sgRNA algorithm

Resource Type: software resource, web application, algorithm resource

Defining Citation: [PMID:25630343](#)

Keywords: CRISPR, Cas, sgrna, prokaryotic immune system, genetic engineering, bio.tools

Funding: William M. Keck Foundation

Availability: Freely available, Free, Available for download, Tutorial available

Resource Name: Off-Spotter

Resource ID: SCR_015739

Alternate IDs: biotools:off-spotter

Alternate URLs: <https://bio.tools/off-spotter>

Record Creation Time: 20220129T080327+0000

Record Last Update: 20260731T042958+0000

Ratings and Alerts

No rating or validation information has been found for Off-Spotter.

No alerts have been found for Off-Spotter.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 43 mentions in open access literature.

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

Dykstra W, et al. (2025) Mutations in GFAP Alter Early Lineage Commitment of Organoids. *Glia*, 73(11), 2167.

Xia Q, et al. (2025) Retinal ganglion cells induce stem cell-derived neuroprotection via IL-12 to SCGF-? crosstalk. *Stem cell research & therapy*, 16(1), 90.

Rahman FA, et al. (2025) DNM1L-mediated fission governs mitophagy & mitochondrial biogenesis during myogenic differentiation. *Cell communication and signaling : CCS*, 23(1), 158.

Zhou Y, et al. (2025) Loss-of-function variants in ciliary genes confer high risk for tetralogy of Fallot. *Science advances*, 11(41), eadt0836.

Bao Y, et al. (2025) The UBA1-STUB1 Axis Mediates Cancer Immune Escape and Resistance to Checkpoint Blockade. *Cancer discovery*, 15(2), 363.

Su X, et al. (2025) Mutations of schizophrenia risk gene SETD1A dysregulate synaptic function in human neurons. *Molecular psychiatry*, 30(12), 5680.

Sui M, et al. (2025) Novel drug-inducible CRISPRa/i systems for rapid and reversible manipulation of gene transcription. *Cellular and molecular life sciences : CMLS*, 82(1), 249.

Peng H, et al. (2025) Quantification profiles of enzyme activity, secretion, and psychosine levels of Krabbe disease galactosylceramidase missense variants. *The Journal of biological chemistry*, 301(7), 110315.

He L, et al. (2024) Tumor Microenvironment-Responsive Nanocapsule Delivery CRISPR/Cas9 to Reprogram the Immunosuppressive Microenvironment in Hepatoma Carcinoma. *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*, 11(26), e2403858.

Zapanta Rinonos S, et al. (2024) dCas9/CRISPR-based methylation of O-6-methylguanine-DNA methyltransferase enhances chemosensitivity to temozolomide in malignant glioma. *Journal of neuro-oncology*, 166(1), 129.

Choi DE, et al. (2024) Base editing strategies to convert CAG to CAA diminish the disease-causing mutation in Huntington's disease. *eLife*, 12.

Madsen S, et al. (2024) A fluorescent perilipin 2 knock-in mouse model reveals a high abundance of lipid droplets in the developing and adult brain. *Nature communications*, 15(1), 5489.

Beddows CA, et al. (2024) Pathogenic hypothalamic extracellular matrix promotes metabolic disease. *Nature*, 633(8031), 914.

Hu T, et al. (2024) [Non-small Cell Lung Cancer Cell Line PC-9 Drug-resistant Mutant Cell Line Establishment and Validation of Their Sensitivity to EGFR Inhibitors]. *Zhongguo fei ai za zhi = Chinese journal of lung cancer*, 27(11), 815.

Bordat C, et al. (2023) Validation of Knock-Out Caco-2 TC7 Cells as Models of Enterocytes of Patients with Familial Genetic Hypobetalipoproteinemias. *Nutrients*, 15(3).

Sladen PE, et al. (2022) Modelling autosomal dominant optic atrophy associated with OPA1 variants in iPSC-derived retinal ganglion cells. *Human molecular genetics*, 31(20), 3478.

Zou Y, et al. (2022) Blood-brain barrier-penetrating single CRISPR-Cas9 nanocapsules for effective and safe glioblastoma gene therapy. *Science advances*, 8(16), eabm8011.

Song J, et al. (2022) Mutant RIG-I enhances cancer-related inflammation through activation of circRIG-I signaling. *Nature communications*, 13(1), 7096.

Salimi-Jeda A, et al. (2022) Inhibition of HIV-1 replication using the CRISPR/cas9-no NLS system as a prophylactic strategy. *Heliyon*, 8(9), e10483.

Dhoke NR, et al. (2021) A universal gene correction approach for FKRFP-associated dystroglycanopathies to enable autologous cell therapy. *Cell reports*, 36(2), 109360.