Resource Summary Report

Generated by dkNET on Sep 12, 2026

CRISPRdirect

RRID:SCR_018186
Type: Tool

Proper Citation

CRISPRdirect (RRID:SCR_018186)

Resource Information

URL: http://crispr.dbcls.jp/

Proper Citation: CRISPRdirect (RRID:SCR_018186)

Description: Software for designing CRISPR/Cas guide RNA with reduced off target sites. Used for rational design of CRISPR/Cas target. Web server for selecting rational CRISPR/Cas targets from input sequence. Server currently incorporates genomic sequences of human, mouse, rat, marmoset, pig, chicken, frog, zebrafish, Ciona, fruit fly, silkworm, Caenorhabditis elegans, Arabidopsis, rice, Sorghum and budding yeast.

Resource Type: analysis service resource, data access protocol, production service resource, service resource, software resource, web service

Defining Citation: PMID:25414360

Keywords: CRISP/Cas guide RNA, reduced off target site, design of CRISP/Cas target, selecting rational target, sequence, genomic sequence, RNA, bio.tools

Funding: Japan Science and Technology Agency ;
Ministry of Education ;
Culture ;
Sports ;
Science and Technology of Japan

Availability: Free, Freely available

Resource Name: CRISPRdirect

Resource ID: SCR_018186

Alternate IDs: biotools:CRISPRdirect

Alternate URLs: https://bio.tools/CRISPRdirect

Record Creation Time: 20220129T080339+0000

Record Last Update: 20260912T195858+0000

Ratings and Alerts

No rating or validation information has been found for CRISPRdirect.

No alerts have been found for CRISPRdirect.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 588 mentions in open access literature.

Listed below are recent publications. The full list is available at dkNET .

Takahashi G, et al. (2026) Initiation of asexual reproduction by the AP2/ERF gene GEMMIFER in Marchantia polymorpha. Current biology : CB, 36(9), 2413.

Lee J, et al. (2026) Modulating the strigolactone pathway to optimize tomato shoot branching for vertical farming. Journal of integrative plant biology, 68(1), 113.

Kelly AA, et al. (2026) Reducing the Sinapine Levels of Camelina sativa Seeds Through Targeted Genome Editing of REF1. Plant biotechnology journal, 24(3), 1839.

Noguchi A, et al. (2026) CAPN15 is a non-proteasomal, ubiquitin-directed calpain protease that regulates cell adhesion by cleaving E-cadherin. The Journal of biological chemistry, 302(1), 111034.

Matsumoto S, et al. (2026) Detection and classification of chromosomes with sister chromatid cohesion defects using object detection models. Scientific reports, 16(1).

Feng P, et al. (2026) cGAMP suppresses FTO expression to promote m6A modification and potentiate antitumor immunity. Cellular and molecular life sciences : CMLS, 83(1).

Charagh S, et al. (2026) Oryza sativa heavy metal ATPase (OsHMA) transporter-mediated cadmium uptake in rice: functional insights for low-Cd breeding. Food chemistry. Molecular sciences, 13, 100425.

Han K, et al. (2026) A dual role for ER-Golgi cargo receptor LMAN1 in supporting CSFV replication and restraining RLR signaling. Journal of virology, 100(3), e0006926.

Gluc M, et al. (2026) A Novel Eukaryotic Ribosome Factor Enables Translation Restart Following Cellular Dormancy. bioRxiv : the preprint server for biology.

Li Z, et al. (2026) IGF2BP3-dependent glutamine/BCAA metabolic rewiring rejuvenates aged human adipose-derived stem cells for enhanced tissue regeneration. Cell discovery, 12(1), 5.

Wang B, et al. (2026) TMPRSS2 is dispensable for lethal SARS-CoV-2 BA.5 infection in humanized hACE2 golden hamsters. European journal of medical research, 31(1), 309.

Nambara T, et al. (2026) Interplay between DYRK1A dosage and aneuploidy-induced neuropathology in Down syndrome. Communications biology, 9(1).

Kang J, et al. (2026) Mevalonate kinase represses anthocyanin biosynthesis via sucrose transporters and gibberellin synthesis pathways in arabidopsis. Plant cell reports, 45(7).

Chen P, et al. (2026) Bombyx mori Jun gene is involved in endoreplication of silk gland cells by regulating S-phase cell cycle genes. Journal of advanced research, 82, 367.

Kumar S, et al. (2026) Geminiviral-CR-gRNA expressed in cowpea efficiently edited MYMV and MYMIV genome to provide resistance against cowpea yellow mosaic disease without hampering plant growth and yield. BMC plant biology, 26(1).

Hou P, et al. (2026) PBLD Orchestrates the STING-Mediated Antiviral Immune Response and Autoimmune Diseases. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 13(4), e14512.

Ono Y, et al. (2026) PSMD12 Overexpression Promotes Lung Adenocarcinoma Progression via Ubiquitin-Proteasome Pathway Dysregulation. Cancer science, 117(3), 644.

Suzuki T, et al. (2026) Lysine lactylation regulates ATF4-mediated stress responses under glucose starvation in canine hemangiosarcoma. Frontiers in veterinary science, 13, 1734339.

Behera L, et al. (2026) An improved Agrobacterium-mediated transformation method for genome editing using CRISPR/Cas9 in elite indica rice (Oryza sativa L.). BMC genomics, 27(1).

Dai L, et al. (2026) Functional Characterization of GA2ox3 in Rice Osmotic Stress Response and Identification of a Superior Allele for Breeding Applications. Plants (Basel, Switzerland), 15(8).