Resource Summary Report

Generated by T1D on Jul 28, 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: service resource, data access protocol, software resource, production service resource, web service, analysis service resource

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: 20260729T044451+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 452 mentions in open access literature.

Listed below are recent publications. The full list is available at T1D .

Wang L, et al. (2025) A receptor antagonist counterbalances multiple systemin phytocytokines in tomato. Cell.

Komaki R, et al. (2025) Necl-4/CADM4 regulates GABAergic synaptic strength on GABAergic inhibitory neurons via ErbB4 activation and prevents neuronal impairments. Molecular neurobiology, 62(12), 15943.

Lin HF, et al. (2025) Characterization of a SARS-CoV-2 infection model in golden hamsters with diabetes mellitus. Virologica Sinica, 40(3), 349.

Liying Z, et al. (2025) BmMed6 modulates mating behavior by ORs and antennae structural genes in the silkworm. iScience, 28(4), 112017.

Nomura J, et al. (2025) ESC models of autism with copy-number variations reveal cell-type-specific translational vulnerability. Cell genomics, 5(6), 100877.

Lu X, et al. (2025) Metabolic engineering for sustainable xylitol production from diverse carbon sources in Pichia pastoris. Microbial cell factories, 24(1), 59.

Tsukamura A, et al. (2025) KNTC1 introduces segmental heterogeneity to mitochondria. Disease models & mechanisms, 18(3).

Saitou H, et al. (2025) Characterization of a Novel Col1a1G643S/+ Osteogenesis Imperfecta Mouse Model with Insights into Skeletal Phenotype, Fragility, and Therapeutic Evaluations. Calcified tissue international, 116(1), 13.

Leeke BJ, et al. (2025) Divergent DNA methylation dynamics in marsupial and eutherian embryos. Nature, 642(8069), 1073.

Chen D, et al. (2025) Dosage-dependent regulation of embryonic diapause by sorbitol dehydrogenase in the silkworm, Bombyx mori. PLoS genetics, 21(10), e1011933.

Freitas-Alves NS, et al. (2025) CRISPR/Cas genome editing in soybean: challenges and new insights to overcome existing bottlenecks. Journal of advanced research, 73, 53.

Yin X, et al. (2025) Calcineurin governs baseline and homeostatic regulations of non-rapid eye movement sleep in mice. Proceedings of the National Academy of Sciences of the United States of America, 122(4), e2418317122.

Hayashi M, et al. (2025) Prognostic Significance of S100A4 in Ovarian Clear Cell Carcinoma: Its Relation to Tumor Progression and Chemoresistance. Cancers, 17(2).

Motooka Y, et al. (2025) Heterozygous mutation in BRCA2 induces accelerated age-dependent decline in sperm quality with male subfertility in rats. Scientific reports, 15(1), 447.

Saha D, et al. (2025) Critical considerations and computational tools in plant genome editing. Heliyon, 11(1), e41135.

Ju Y, et al. (2025) Inactivation of glutathione S-transferase alpha 4 blocks Enterococcus faecalis-induced bystander effect by promoting macrophage ferroptosis. Gut microbes, 17(1), 2451090.

Xiang G, et al. (2025) Ethylene increases the NaHCO3 stress tolerance of grapevines partially via the VvERF1B-VvMYC2-VvPMA10 pathway. Plant biotechnology journal, 23(4), 1076.

Hou P, et al. (2025) Phenazine biosynthesis-like domain-containing protein (PBLD) and Cedrelone promote antiviral immune response by activating NF-??B. Nature communications, 16(1), 496.

Yoro E, et al. (2025) The transcription factor PpRKD evokes female developmental fate in the sexual reproductive organs of Physcomitrium patens. The New phytologist, 245(2), 653.

Watanabe Y, et al. (2025) ALS-associated RNA-binding proteins promote UNC13A transcription through REST downregulation. The EMBO journal, 44(17), 4745.