Resource Summary Report

Generated by <u>dkNET</u> on May 18, 2025

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: data access protocol, service resource, production service resource, analysis service resource, web service, software 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: 20250517T060354+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: <u>SciCrunch Registry</u>

Usage and Citation Metrics

We found 376 mentions in open access literature.

Listed below are recent publications. The full list is available at <u>dkNET</u>.

Fujimoto Y, et al. (2025) Chicken ANP32A-independent replication of highly pathogenic avian influenza viruses potentially leads to mammalian adaptation-related amino acid substitutions in viral PB2 and PA proteins. Journal of virology, 99(1), e0184024.

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.

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.

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 agedependent 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.

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.

Tsuji-Hosokawa A, et al. (2025) Genetically humanized phenylketonuria mouse model as a testing tool for human genome editing in fertilized eggs. Journal of inherited metabolic disease, 48(1), e12803.

Ogawa Y, et al. (2025) GATA4 binding to the Sox9 enhancer mXYSRa/Enh13 is critical for testis differentiation in mouse. Communications biology, 8(1), 81.

Niu Y, et al. (2025) Super-enhancer MYCNOS-SE promotes chemoresistance in small cell lung cancer by recruiting transcription factors CTCF and KLF15. Oncogene, 44(4), 255.

Miyaji T, et al. (2025) BIL7 enhances plant growth by regulating the transcription factor BIL1/BZR1 during brassinosteroid signaling. The Plant journal : for cell and molecular biology, 121(2), e17212.

Ran M, et al. (2025) Microsporidian Nosema bombycis secretes serine protease inhibitor to suppress host cell apoptosis via Caspase BmICE. PLoS pathogens, 21(1), e1012373.

Nishio S, et al. (2024) ZP2 cleavage blocks polyspermy by modulating the architecture of the egg coat. Cell, 187(6), 1440.

Goto N, et al. (2024) ISWI chromatin remodeling complexes recruit NSD2 and H3K36me2 in pericentromeric heterochromatin. The Journal of cell biology, 223(8).

Gao L, et al. (2024) Promotion of seedling germination in Arabidopsis by B-box zinc-finger protein BBX32. Current biology : CB, 34(14), 3152.

Sharma AK, et al. (2024) Engineering CRISPR/Cas9 therapeutics for cancer precision medicine. Frontiers in genetics, 15, 1309175.

Kubo T, et al. (2024) Tubulin glycylation controls ciliary motility through modulation of outerarm dyneins. Molecular biology of the cell, 35(7), ar90.

Shao L, et al. (2024) DKK1-SE recruits AP1 to activate the target gene DKK1 thereby promoting pancreatic cancer progression. Cell death & disease, 15(8), 566.

Kawahata T, et al. (2024) HIF3A gene disruption causes abnormal alveoli structure and early neonatal death. PloS one, 19(5), e0300751.