

Resource Summary Report

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CRISPR-P

RRID:SCR_016941

Type: Tool

Proper Citation

CRISPR-P (RRID:SCR_016941)

Resource Information

URL: <http://crispr.hzau.edu.cn/CRISPR/>

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Description: Web tool for synthetic single-guide RNA design of CRISPR-system in plants. Allows to search for high specificity Cas9 target sites within DNA sequences of interest, which also provides off-target loci prediction for specificity analyses and marks restriction enzyme cutting site to every sgRNA for further convenient in experiment.

Synonyms: CRISPR-P 2.0, Clustered Regularly Interspaced Short Palindromic Repeats P, CRISPR P

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

Defining Citation: [PMID:24719468](#)

Keywords: synthetic, single, RNA, CRISP, plant, Cas9, target, DNA, sequence, analysis, restriction, enzyme, sgRNA, bio.tools

Funding: National Basic Research Program of China ;
Program for New Century Excellent Talents in University ;
Fundamental Research Funds for the Central Universities

Availability: Free, Freely available

Resource Name: CRISPR-P

Resource ID: SCR_016941

Alternate IDs: biotools:CRISPR-P

Alternate URLs: <https://bio.tools/CRISPR-P>

Record Creation Time: 20220129T080332+0000

Record Last Update: 20250421T054142+0000

Ratings and Alerts

No rating or validation information has been found for CRISPR-P.

No alerts have been found for CRISPR-P.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 27 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

Cai Z, et al. (2024) GmAMT2.1/2.2-dependent ammonium nitrogen and metabolites shape rhizosphere microbiome assembly to mitigate cadmium toxicity. NPJ biofilms and microbiomes, 10(1), 60.

Chen Z, et al. (2024) Heat Stress Responsive Aux/IAA Protein, OsIAA29 Regulates Grain Filling Through OsARF17 Mediated Auxin Signaling Pathway. Rice (New York, N.Y.), 17(1), 16.

Zhou Z, et al. (2024) Transcriptome analysis to identify genes related to programmed cell death resulted from manipulating of BnaFAH ortholog by CRISPR/Cas9 in Brassica napus. Scientific reports, 14(1), 26389.

Sandhu J, et al. (2024) Natural variation in LONELY GUY-Like 1 regulates rice grain weight under warmer night conditions. Plant physiology, 196(1), 164.

Tu M, et al. (2024) A CRISPR/Cas9-induced male-sterile line facilitating easy hybrid production in polyploid rapeseed (Brassica napus). Horticulture research, 11(7), uhae139.

Zhai D, et al. (2024) Reciprocal conversion between annual and polycarpic perennial flowering behavior in the Brassicaceae. Cell, 187(13), 3319.

Ludwig Y, et al. (2023) CRISPR-mediated promoter editing of a cis-regulatory element of

OsNAS2 increases Zn uptake/translocation and plant yield in rice. *Frontiers in genome editing*, 5, 1308228.

Wang C, et al. (2021) Xa7, a Small Orphan Gene Harboring Promoter Trap for AvrXa7, Leads to the Durable Resistance to *Xanthomonas oryzae* Pv. *oryzae*. *Rice* (New York, N.Y.), 14(1), 48.

Huang Y, et al. (2021) OsELF3h Regulates Plant Growth and Pollen Development at Translational Level Presumably through Interaction with OsMTA2. *Plants* (Basel, Switzerland), 10(6).

Tonosaki K, et al. (2021) Mutation of the imprinted gene OsEMF2a induces autonomous endosperm development and delayed cellularization in rice. *The Plant cell*, 33(1), 85.

Hu J, et al. (2021) The Elite Alleles of OsSPL4 Regulate Grain Size and Increase Grain Yield in Rice. *Rice* (New York, N.Y.), 14(1), 90.

Dhatt BK, et al. (2021) Allelic variation in rice Fertilization Independent Endosperm 1 contributes to grain width under high night temperature stress. *The New phytologist*, 229(1), 335.

Zhong J, et al. (2020) A putative AGO protein, OsAGO17, positively regulates grain size and grain weight through OsmiR397b in rice. *Plant biotechnology journal*, 18(4), 916.

Zheng M, et al. (2020) Knockout of two BnaMAX1 homologs by CRISPR/Cas9-targeted mutagenesis improves plant architecture and increases yield in rapeseed (*Brassica napus* L.). *Plant biotechnology journal*, 18(3), 644.

Wang D, et al. (2020) Overexpression of OsMYB305 in Rice Enhances the Nitrogen Uptake Under Low-Nitrogen Condition. *Frontiers in plant science*, 11, 369.

Jiang M, et al. (2020) An Inositol 1,3,4,5,6-Pentakisphosphate 2-Kinase 1 Mutant with a 33-nt Deletion Showed Enhanced Tolerance to Salt and Drought Stress in Rice. *Plants* (Basel, Switzerland), 10(1).

Ogata T, et al. (2020) CRISPR/Cas9-targeted mutagenesis of OsERA1 confers enhanced responses to abscisic acid and drought stress and increased primary root growth under nonstressed conditions in rice. *PloS one*, 15(12), e0243376.

Choi J, et al. (2020) The negative regulator SMAX1 controls mycorrhizal symbiosis and strigolactone biosynthesis in rice. *Nature communications*, 11(1), 2114.

Chen Y, et al. (2020) Roles of SIETR7, a newly discovered ethylene receptor, in tomato plant and fruit development. *Horticulture research*, 7, 17.

Feng Y, et al. (2020) Transcription factor BnaA9.WRKY47 contributes to the adaptation of *Brassica napus* to low boron stress by up-regulating the boric acid channel gene BnaA3.NIP5;1. *Plant biotechnology journal*, 18(5), 1241.