

Resource Summary Report

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Eukaryotic Pathogen CRISPR guide RNA/DNA Design Tool

RRID:SCR_018297

Type: Tool

Proper Citation

Eukaryotic Pathogen CRISPR guide RNA/DNA Design Tool (RRID:SCR_018297)

Resource Information

URL: <http://grna.ctegd.uga.edu/>

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Description: Web tool tailored to design CRISPR guide RNAs for Eukaryotic pathogens. Used to identify gRNAs in input sequence, and then calculate ranked list of those gRNAs based on on-target and off-target hits in selected or uploaded pathogen genome, to predict gRNA activity and to identified microhomology pairs flanking gRNA targeted cut site.

Abbreviations: EuPaGDT

Synonyms: Eukaryotic Pathogen gRNA Design Tool, CRISPR/Cas gRNA design tool

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

Defining Citation: [PMID:28348817](#)

Keywords: CRISPR-Cas9, eukaryotic pathogens, genome editing, gRNA design, gRNA input sequence, pathogen genome, identify microhomology pairs

Availability: Free, Freely available

Resource Name: Eukaryotic Pathogen CRISPR guide RNA/DNA Design Tool

Resource ID: SCR_018297

Record Creation Time: 20220129T080339+0000

Record Last Update: 20260731T043028+0000

Ratings and Alerts

No rating or validation information has been found for Eukaryotic Pathogen CRISPR guide RNA/DNA Design Tool.

No alerts have been found for Eukaryotic Pathogen CRISPR guide RNA/DNA Design Tool.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 136 mentions in open access literature.

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

Wang X, et al. (2026) The autophagy-related protein PIAtg26b regulates vegetative growth, reproductive processes, autophagy, and pathogenicity in *Peronophythora litchii*. *Virulence*, 17(1), 2606498.

Haase R, et al. (2025) RNG2 tethers the conoid to the apical polar ring in *Toxoplasma gondii* to enable parasite motility and invasion. *PLoS biology*, 23(11), e3003506.

Li F, et al. (2025) Involvement of a variant secretory protein in virulence of emerging *Cryptosporidium parvum* subtypes. *Virulence*, 16(1), 2514077.

Shu F, et al. (2025) Calcium-dependent protein kinases 2A involved in the growth of both asexual and sexual stages of *Cryptosporidium parvum*. *PLoS neglected tropical diseases*, 19(5), e0013107.

Ahmed M, et al. (2025) Cyclic AMP compartmentalization drives signal specificity to control vector colonization and mammalian host infection by American trypanosomes. *bioRxiv : the preprint server for biology*.

Shi Y, et al. (2025) Elevated NAD⁺ drives Sir2A-mediated GC⁺ deacetylation and OES localization for *Plasmodium ookinete* gliding and mosquito infection. *Nature communications*, 16(1), 2259.

Carlson J, et al. (2025) TcCARP3 modulates compartmentalized cAMP signals involved in osmoregulation, infection of mammalian cells, and colonization of the triatomine vector in the human pathogen *Trypanosoma cruzi*. *mBio*, 16(6), e0099425.

Huang G, et al. (2025) Lysosome and plasma membrane Piezo channels of *Trypanosoma cruzi* are essential for proliferation, differentiation and infectivity. *PLoS pathogens*, 21(4), e1013105.

Deng S, et al. (2025) Assessing the function of the alternative electron transport chain in the *Cryptosporidium parvum* mitosome. *mBio*, 16(12), e0112025.

- Kimball A, et al. (2025) Independent evolution of holocentric chromosomes in an early branching apicomplexan parasite. *bioRxiv : the preprint server for biology*.
- Liu Y, et al. (2025) An inner membrane complex protein IMC1g in *Plasmodium berghei* is involved in asexual stage schizogony and parasite transmission. *mBio*, 16(1), e0265224.
- Hu Z, et al. (2025) Proximity-activated guide RNA of CRISPR-Cas12a for programmable diagnostic detection and gene regulation. *Nucleic acids research*, 53(3).
- Mejía-Jaramillo AM, et al. (2025) Transcriptomic analysis of benznidazole-resistant *Trypanosoma cruzi* clone reveals nitroreductase I-independent resistance mechanisms. *PloS one*, 20(2), e0314189.
- Hu X, et al. (2025) Functional diversification of the MADS-box gene family in fine-tuning the dimorphic transition of *Talaromyces marneffe*. *mSystems*, 10(7), e0046425.
- Xu X, et al. (2025) Bacterial alarmone (p)ppGpp mediates the pathogenicity of *Clavibacter michiganensis* via a dual mechanism that affects both enzyme production and the Tat secretion system. *mSystems*, 10(9), e0013525.
- Yuan X, et al. (2025) BBSome deficiency in *Leishmania* reveals divergent functions in trypanosomatid parasites. *Parasites & vectors*, 18(1), 60.
- Watson RG, et al. (2025) Simple growth conditions improve targeted gene deletion in *Cryptococcus neoformans*. *mSphere*, 10(4), e0107024.
- Bertolini MS, et al. (2025) Generation of inositol polyphosphates through a phospholipase C-independent pathway involving carbohydrate and sphingolipid metabolism in *Trypanosoma cruzi*. *mBio*, 16(5), e0331824.
- Xu R, et al. (2025) *Cryptosporidium* exports a mucin glycoprotein into the microvilli of intestinal epithelium. *Virulence*, 16(1), 2553780.
- Zhao Z, et al. (2025) Identification of an uncharacterized protein as a novel regulator of *Giardia lamblia* virus (GLV) infection in *Giardia duodenalis*. *Journal of virology*, 99(10), e0088325.