

Resource Summary Report

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ApiDB CryptoDB

RRID:SCR_013455

Type: Tool

Proper Citation

ApiDB CryptoDB (RRID:SCR_013455)

Resource Information

URL: <http://cryptodb.org/cryptodb/>

Proper Citation: ApiDB CryptoDB (RRID:SCR_013455)

Description: An integrated genomic and functional genomic database for the parasite *Cryptosporidium*. CryptoDB integrates whole genome sequence and annotation along with experimental data and environmental isolate sequences provided by community researchers. The database includes supplemental bioinformatics analyses and a web interface for data-mining. Organisms included in CryptoDB are *Cryptosporidium parvum*, *Cryptosporidium hominis*, *Cryptosporidium muris* and environmental isolate sequences from numerous species. CryptoDB is allied with the databases PlasmoDB and ToxoDB via ApiDB, an NIH/NIAID-funded Bioinformatics Resource Center. Tools include: * BLAST: Identify Sequence Similarities * Sequence Retrieval: Retrieve Specific Sequences using IDs and coordinates * PubMed and Entrez: View the Latest *Cryptosporidium* Pubmed and Entrez Results * Genome Browser: View Sequences and Features in the genome browser * CryptoCyc: Explore Automatically Defined Metabolic Pathways * Searches via Web Services: Web service access to our data

Abbreviations: ApiDB CryptoDB

Synonyms: CryptoDB, *Cryptosporidium* Genomics Resource

Resource Type: database, data or information resource

Defining Citation: [PMID:16381902](#)

Keywords: cryptosporidium parvum, cryptosporidium, cryptosporidium genome, cryptosporidium orf, cryptosporidium sage tag alignments, cryptosporidium snp, genomic sequence, dna motif, snp, est, orf, data set, bio.tools

Funding: NIAID contract HHSN266200400037C

Resource Name: ApiDB CryptoDB

Resource ID: SCR_013455

Alternate IDs: nif-0000-02698, biotools:cryptodb, r3d100012265

Alternate URLs: <https://bio.tools/cryptodb>

Old URLs: <http://cryptodb.org/>

Record Creation Time: 20220129T080316+0000

Record Last Update: 20260807T042808+0000

Ratings and Alerts

No rating or validation information has been found for ApiDB CryptoDB.

No alerts have been found for ApiDB CryptoDB.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 26 mentions in open access literature.

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

Vanni I, et al. (2026) Exploring the repertoire of rhomboid proteases in *Cryptosporidium parvum* parasite: phylogenesis, structural motifs, and cellular localization in sporozoite cells. *Frontiers in cellular and infection microbiology*, 16, 1733450.

Wang L, et al. (2025) Host cell KRT-18 as a non-redox dependent interactor of *Cryptosporidium parvum* PDI enables parasite infection. *Communications biology*, 8(1), 1840.

Farhat S, et al. (2021) Rapid protein evolution, organellar reductions, and invasive intronic elements in the marine aerobic parasite dinoflagellate *Amoebophrya* spp. *BMC biology*, 19(1), 1.

Leung JM, et al. (2020) A doublecortin-domain protein of *Toxoplasma* and its orthologues bind to and modify the structure and organization of tubulin polymers. *BMC molecular and cell biology*, 21(1), 8.

Xu Z, et al. (2020) Comparative genomic analysis of three intestinal species reveals reductions in secreted pathogenesis determinants in bovine-specific and non-pathogenic *Cryptosporidium* species. *Microbial genomics*, 6(6).

Xu Z, et al. (2019) Comparative analysis reveals conservation in genome organization among intestinal *Cryptosporidium* species and sequence divergence in potential secreted

pathogenesis determinants among major human-infecting species. BMC genomics, 20(1), 406.

Bones AJ, et al. (2019) Past and future trends of *Cryptosporidium* in vitro research. Experimental parasitology, 196, 28.

Kibria KMK, et al. (2019) A genome-wide analysis of coatomer protein (COP) subunits of apicomplexan parasites and their evolutionary relationships. BMC genomics, 20(1), 98.

Mi R, et al. (2017) Immunolocation and enzyme activity analysis of *Cryptosporidium parvum* enolase. Parasites & vectors, 10(1), 273.

Moog D, et al. (2017) Genomic and Proteomic Evidence for the Presence of a Peroxisome in the Apicomplexan Parasite *Toxoplasma gondii* and Other Coccidia. Genome biology and evolution, 9(11), 3108.

Yadav P, et al. (2017) Multilocus sequence typing of *Cryptosporidium hominis* from northern India. The Indian journal of medical research, 145(1), 102.

Sobotka R, et al. (2017) Extensive gain and loss of photosystem I subunits in chromerid algae, photosynthetic relatives of apicomplexans. Scientific reports, 7(1), 13214.

de Lucio A, et al. (2016) Prevalence and Genetic Diversity of *Giardia duodenalis* and *Cryptosporidium* spp. among School Children in a Rural Area of the Amhara Region, North-West Ethiopia. PloS one, 11(7), e0159992.

Ramo A, et al. (2016) Intra-Species Diversity and Panmictic Structure of *Cryptosporidium parvum* Populations in Cattle Farms in Northern Spain. PloS one, 11(2), e0148811.

Hebert FO, et al. (2015) Identification of candidate mimicry proteins involved in parasite-driven phenotypic changes. Parasites & vectors, 8, 225.

Guo Y, et al. (2015) Comparative genomic analysis reveals occurrence of genetic recombination in virulent *Cryptosporidium hominis* subtypes and telomeric gene duplications in *Cryptosporidium parvum*. BMC genomics, 16(1), 320.

J??kalski M, et al. (2015) DB-AT: a 2015 update to the Full-parasites database brings a multitude of new transcriptomic data for apicomplexan parasites. Nucleic acids research, 43(Database issue), D631.

Woo YH, et al. (2015) Chromerid genomes reveal the evolutionary path from photosynthetic algae to obligate intracellular parasites. eLife, 4, e06974.

Swann J, et al. (2015) Systems analysis of host-parasite interactions. Wiley interdisciplinary reviews. Systems biology and medicine, 7(6), 381.

Oberstaller J, et al. (2014) The *Cryptosporidium parvum* ApiAP2 gene family: insights into the evolution of apicomplexan AP2 regulatory systems. Nucleic acids research, 42(13), 8271.