## **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/

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**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 datamining. 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: data or information resource, database

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

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

Old URLs: http://cryptodb.org/

**Record Creation Time:** 20220129T080316+0000

Record Last Update: 20250502T060138+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 24 mentions in open access literature.

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

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).

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

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.

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.

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.

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

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 parasitedriven 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.

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

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.

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.

Cook WJ, et al. (2012) Crystal structure of Cryptosporidium parvum pyruvate kinase. PloS one, 7(10), e46875.

Arenas AF, et al. (2010) Genome-wide survey and evolutionary analysis of trypsin proteases in apicomplexan parasites. Genomics, proteomics & bioinformatics, 8(2), 103.