

Resource Summary Report

Generated by SPARC SAWG on Sep 17, 2026

CCDB - The CyberCell Database

RRID:SCR_013423

Type: Tool

Proper Citation

CCDB - The CyberCell Database (RRID:SCR_013423)

Resource Information

URL: <http://redpoll.pharmacy.ualberta.ca/CCDB>

Proper Citation: CCDB - The CyberCell Database (RRID:SCR_013423)

Description: The CyberCell database (CCDB) is a comprehensive collection of detailed enzymatic, biological, chemical, genetic, and molecular biological data about E. coli (strain K12, MG1655). It is intended to provide sufficient information and querying capacity for biologists and computer scientists to use computers or detailed mathematical models to simulate all or part of a bacterial cell at a nanoscopic (10⁻⁹ m), mesoscopic (10⁻⁸ m) and microscopic (10⁻⁶ m) level. The CCDB database is actually several databases: CCDB contains quantitative proteomic, genomic and metabolic information about E. coli. CC3D contains 3D structural data for E. coli structural proteomics work CCRD contains detailed information on E. coli RNA molecules CCMD database contains quantitative information on E. coli metabolites. Each database is presented as a re-formattable synoptic table which allows users to casually browse the databases. Detailed information about each gene, protein, RNA, structure or metabolite may be obtained by clicking on the *Card button on the left column. Each card contains more than 60 fields concerning all aspects of the sequence, function or structure of a given molecule. CCDB users may also perform text searches (using the Search button), BLAST sequence searches (using the BLAST button) or conduct more detailed data extraction or relational data searches (using the Extract button).

Synonyms: CCDB

Resource Type: data or information resource, database

Keywords: e. coli, e. coli chemistry, e. coli enzyme, e. coli genetics, e. coli metabolism, e. coli metabolite, e. coli molecular biology, e. coli proteomics, e. coli rna molecule, e. coli structural proteomics, mg1655, strain k12

Resource Name: CCDB - The CyberCell Database

Resource ID: SCR_013423

Alternate IDs: nif-0000-02644, r3d100010131

Record Creation Time: 20220129T080316+0000

Record Last Update: 20260912T200211+0000

Ratings and Alerts

No rating or validation information has been found for CCDB - The CyberCell Database.

No alerts have been found for CCDB - The CyberCell Database.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 6 mentions in open access literature.

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

Seidensticker MT, et al. (2026) A Regional DNA Barcode Library for Northern Rocky Mountain Arthropods to Support Biodiversity and Molecular Ecological Research. Ecology and evolution, 16(2), e73150.

Vihavainen J, et al. (2025) Megabarcoding dark taxa - Assessing the utility of mass DNA barcoding for phorid fly species discovery. PloS one, 20(12), e0334948.

Loisel QEA, et al. (2025) Scoping review of needs for digital technology in co-creation: a health CASCADE study. Research involvement and engagement, 11(1), 121.

Johansson NR, et al. (2025) Diversity of fungi attached to birds corresponds to the habitat ecologies of their avian dispersal vectors. Annals of botany, 136(4), 721.

Riley M, et al. (2006) Escherichia coli K-12: a cooperatively developed annotation snapshot--2005. Nucleic acids research, 34(1), 1.

Galperin MY, et al. (2005) The Molecular Biology Database Collection: 2005 update. Nucleic acids research, 33(Database issue), D5.