

Resource Summary Report

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ddCt

RRID:SCR_003396

Type: Tool

Proper Citation

ddCt (RRID:SCR_003396)

Resource Information

URL: <http://www.bioconductor.org/packages/release/bioc/html/ddCt.html>

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Description: Software package providing an approximation method to determine relative gene expression with quantitative real-time PCR (qRT-PCR) experiments. It requires no standard curve for each primer-target pair, therefore reducing the working load and yet returning accurate enough results as long as the assumptions of the amplification efficiency hold. The package implements a pipeline to collect, analyze and visualize qRT-PCR results, for example those from TaqMan SDM software, mainly using the ddCt method. The pipeline can be either invoked by a script in command-line or through the API consisting of S4-Classes, methods and functions.

Abbreviations: ddCt

Synonyms: Delta-Delta-Ct

Resource Type: software resource

Keywords: differential expression, gene expression, microtitre plate assay, q-pcr

Availability: Free, Available for download, Freely available

Resource Name: ddCt

Resource ID: SCR_003396

Alternate IDs: OMICS_02312

Record Creation Time: 20220129T080218+0000

Record Last Update: 20260725T190539+0000

Ratings and Alerts

No rating or validation information has been found for ddCt.

No alerts have been found for ddCt.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 321 mentions in open access literature.

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

Caetano-Silva E, et al. (2025) Social stress worsens colitis through α -adrenergic-driven oxidative stress in intestinal mucosal compartments. *bioRxiv : the preprint server for biology*.

Tomura T, et al. (2025) Dihydrotestosterone and 17 β -estradiol modulate TMJ osteoarthritis development and reveal sex-specific differences in pathogenesis. *Scientific reports*, 15(1), 18740.

Chen J-f, et al. (2025) Light-responsive transcription factor CmOzf integrates conidiation, fruiting body development, and secondary metabolism in *Cordyceps militaris*. *Microbiology spectrum*, 13(12), e0105725.

Beadell B, et al. (2025) Effect of antibiotics on Kupffer cell immunometabolism relative to intracellular killing of *S. aureus* using NAD(P)H fluorescence lifetime imaging. *mBio*, 16(11), e0212425.

Sinkó R, et al. (2025) Novel Biomarkers Reveal Mismatch Between Tissue and Serum Thyroid Hormone Status in Amiodarone-Induced Hyperthyroidism. *The Journal of clinical endocrinology and metabolism*, 110(2), 374.

Tomczak K, et al. (2025) Plasma DNA Methylation-Based Biomarkers for MPNST Detection in Patients With Neurofibromatosis Type 1. *Molecular carcinogenesis*, 64(1), 44.

Hernández-Blanco C, et al. (2025) The phase I RELEASE clinical trial to evaluate the safety of NK cells in COVID-19. *iScience*, 28(2), 111698.

Hein V, et al. (2025) The GD3 ganglioside promotes cell growth, plasticity and chemotherapy resistance of human glioblastoma cancer stem cells. *Cancer cell international*, 25(1), 246.

Schips TG, et al. (2025) In vitro and in vivo characterization of wild type BMP9 and a non-osteogenic variant in models of pulmonary arterial hypertension. *PloS one*, 20(7), e0329089.

Potts CM, et al. (2025) Exploration of Conserved Human Adipose Subpopulations Using Targeted Single-Nuclei RNA Sequencing Data Sets. *Journal of the American Heart*

Association, 14(6), e038465.

Aksoy-Ozer ZB, et al. (2024) The Role of Zinc on Liver Fibrosis by Modulating ZIP14 Expression Throughout Epigenetic Regulatory Mechanisms. *Biological trace element research*, 202(11), 5094.

Xue M, et al. (2024) Increased cellular protein modification by methylglyoxal activates endoplasmic reticulum-based sensors of the unfolded protein response. *Redox biology*, 69, 103025.

Nhu NTQ, et al. (2024) Flagellar switch inverted repeat impacts flagellar invertibility and varies *Clostridioides difficile* RT027/MLST1 virulence. *bioRxiv : the preprint server for biology*.

Kim G, et al. (2024) Tunable translation-level CRISPR interference by dCas13 and engineered gRNA in bacteria. *Nature communications*, 15(1), 5319.

Sasivimolrattana T, et al. (2024) Upregulation of HPV16E1 and E7 expression and FOXO3a mRNA downregulation in high-grade cervical neoplasia. *PeerJ*, 12, e18601.

Mendes Felgueira CA, et al. (2024) Growth-phase-dependent control of rRNA synthesis in *Saccharomyces cerevisiae*. *mSphere*, 9(10), e0049324.

Fan G, et al. (2024) Paternal preconception donepezil exposure enhances learning in offspring. *Behavioral and brain functions : BBF*, 20(1), 25.

Frohwitter J, et al. (2024) A new *Zymomonas mobilis* platform strain for the efficient production of chemicals. *Microbial cell factories*, 23(1), 143.

Ferreira JCCG, et al. (2024) Postnatal Zika virus infection leads to morphological and cellular alterations within the neurogenic niche. *Disease models & mechanisms*, 17(2).

Brown EJ, et al. (2024) PRMT5 inhibition shows in vitro efficacy against H3K27M-altered diffuse midline glioma, but does not extend survival in vivo. *Scientific reports*, 14(1), 328.