Resource Summary Report

Generated by RRID on Apr 19, 2025

DEXUS

RRID:SCR_001309
Type: Tool

Proper Citation

DEXUS (RRID:SCR_001309)

Resource Information

URL: http://www.bioconductor.org/packages/release/bioc/html/dexus.html

Proper Citation: DEXUS (RRID:SCR_001309)

Description: Software package that identifies differentially expressed genes in RNA-Seq data under all possible study designs such as studies without replicates, without sample groups, and with unknown conditions. It works also for known conditions, for example for RNA-Seq data with two or multiple conditions. RNA-Seq read count data can be provided both by the S4 class Count Data Set and by read count matrices. Differentially expressed transcripts can be visualized by heatmaps, in which unknown conditions, replicates, and samples groups are also indicated. This software is fast since the core algorithm is written in C. For very large data sets, a parallel version of DEXUS is provided in this package. DEXUS is a statistical model that is selected in a Bayesian framework by an EM algorithm. It does not need replicates to detect differentially expressed transcripts, since the replicates (or conditions) are estimated by the EM method for each transcript. The method provides an informative/non-informative value to extract differentially expressed transcripts at a desired significance level or power.

Abbreviations: DEXUS

Synonyms: DEXUS - Identifying Differential Expression in RNA-Seq Studies with Unknown Conditions or without Replicates

Resource Type: software resource

Defining Citation: PMID:24049071

Keywords: classification, differential expression, gene expression, hapmap, quality control, rna-seq, sequencing, bio.tools

Funding:

Availability: GNU Lesser General Public License, v2 or newer

Resource Name: DEXUS

Resource ID: SCR_001309

Alternate IDs: biotools:dexus, OMICS_02024

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

Record Creation Time: 20220129T080206+0000

Record Last Update: 20250410T064702+0000

Ratings and Alerts

No rating or validation information has been found for DEXUS.

No alerts have been found for DEXUS.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 1 mentions in open access literature.

Listed below are recent publications. The full list is available at RRID.

Komai T, et al. (2018) Transforming Growth Factor-? and Interleukin-10 Synergistically Regulate Humoral Immunity via Modulating Metabolic Signals. Frontiers in immunology, 9, 1364.