

Resource Summary Report

Generated by [SPARC SAWG](#) on Aug 9, 2026

[plgem](#)

RRID:SCR_001355

Type: Tool

Proper Citation

plgem (RRID:SCR_001355)

Resource Information

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

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Description: Software to detect differential expression in microarray and proteomics datasets. Its use has been shown to improve the detection of differentially expressed genes or proteins in these datasets.

Abbreviations: plgem

Synonyms: Power Law Global Error Model

Resource Type: software resource

Keywords: differential expression, microarray, proteomics, bio.tools

Availability: Free, Available for download, Freely available

Resource Name: plgem

Resource ID: SCR_001355

Alternate IDs: OMICS_01984, biotools:plgem

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

License: GNU General Public License, v3

Record Creation Time: 20220129T080207+0000

Record Last Update: 20260808T185726+0000

Ratings and Alerts

No rating or validation information has been found for plgem.

No alerts have been found for plgem.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 16 mentions in open access literature.

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

Lee J, et al. (2026) Phenotypic discovery and therapeutic evaluation of an ITGA3B1-targeting antibody-drug conjugate for bladder cancer. *Science advances*, 12(1), eady0041.

Custodio RJP, et al. (2025) Unraveling Predominantly Inattentive ADHD (ADHD-PI): Insights from Proteomic Analysis of the Striatum of Thyroid Hormone-Responsive Protein (THRSP)-Overexpressing Mice. *Molecular neurobiology*, 62(10), 13225.

Schiksnis C, et al. (2024) Proteomics analysis reveals differential acclimation of coastal and oceanic *Synechococcus* to climate warming and iron limitation. *Frontiers in microbiology*, 15, 1323499.

Wang Z, et al. (2024) The deubiquitinase cofactor UAF1 interacts with USP1 and plays an essential role in spermiogenesis. *iScience*, 27(4), 109456.

Custodio RJP, et al. (2023) Hippocampal dentate gyri proteomics reveals Wnt signaling involvement in the behavioral impairment in the THRSP-overexpressing ADHD mouse model. *Communications biology*, 6(1), 55.

Yang Y, et al. (2022) StatsPro: Systematic integration and evaluation of statistical approaches for detecting differential expression in label-free quantitative proteomics. *Journal of proteomics*, 250, 104386.

Shinde A, et al. (2021) TNF- α differentially modulates subunit levels of respiratory electron transport complexes of ER/PR +ve/-ve breast cancer cells to regulate mitochondrial complex activity and tumorigenic potential. *Cancer & metabolism*, 9(1), 19.

Rajamäki ML, et al. (2020) Nuclear proteome of virus-infected and healthy potato leaves. *BMC plant biology*, 20(1), 355.

Lee YY, et al. (2020) Biological Effects of Korean Red Ginseng Polysaccharides in Aged Rat Using Global Proteomic Approach. *Molecules (Basel, Switzerland)*, 25(13).

Lee HY, et al. (2019) Refinements of LC-MS/MS Spectral Counting Statistics Improve Quantification of Low Abundance Proteins. *Scientific reports*, 9(1), 13653.

Paternoster V, et al. (2019) Brain proteome changes in female Brd1+/- mice unmask dendritic spine pathology and show enrichment for schizophrenia risk. *Neurobiology of disease*, 124, 479.

Kim ST, et al. (2018) The N-recognin UBR4 of the N-end rule pathway is required for neurogenesis and homeostasis of cell surface proteins. *PloS one*, 13(8), e0202260.

Luo Y, et al. (2017) SWATH-based proteomics identified carbonic anhydrase 2 as a potential diagnosis biomarker for nasopharyngeal carcinoma. *Scientific reports*, 7, 41191.

Walworth NG, et al. (2016) Mechanisms of increased *Trichodesmium* fitness under iron and phosphorus co-limitation in the present and future ocean. *Nature communications*, 7, 12081.

Grapov D, et al. (2015) The human colostrum whey proteome is altered in gestational diabetes mellitus. *Journal of proteome research*, 14(1), 512.

Kim Y, et al. (2014) Comparative proteomic profiling of pancreatic ductal adenocarcinoma cell lines. *Molecules and cells*, 37(12), 888.