

Resource Summary Report

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MUMA

RRID:SCR_002412

Type: Tool

Proper Citation

MUMA (RRID:SCR_002412)

Resource Information

URL: <http://cran.r-project.org/web/packages/muma/>

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Description: Software that provides guidelines for the whole process of metabolomic data interpretation, from data pre-processing, to dataset exploration and visualization, to identification of potentially interesting metabolites. Guidelines outline the following processes: preprocessing of high-throughput data (normalization and scalings); principal component analysis with help tool for choosing best-separating principal components and automatic testing for outliers; automatic univariate analysis for parametric and non-parametric data, with generation of specific reports (volcano and box plots); partial least square discriminant analysis (PLS-DA); orthogonal partial least square discriminant analysis (OPLS-DA); Statistical Total Correlation Spectroscopy (STOCSY); and Ratio Analysis Nuclear Magnetic Resonance (NMR) Spectroscopy (RANSY).

Abbreviations: MUMA

Synonyms: Metabolomics Univariate and Multivariate Analysis (MUMA), Metabolomic Univariate and Multivariate Analysis

Resource Type: standalone software, software resource, software application

Keywords: standalone software, mac os x, unix/linux, windows, r, metabolomics, univariate, multivariate, data analysis

Availability: Free, Available for download, Freely available

Resource Name: MUMA

Resource ID: SCR_002412

Alternate IDs: OMICS_03370

License: GNU General Public License v2

Record Creation Time: 20220129T080213+0000

Record Last Update: 20260803T040333+0000

Ratings and Alerts

No rating or validation information has been found for MUMA.

No alerts have been found for MUMA.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 28 mentions in open access literature.

Listed below are recent publications. The full list is available at [T1D](#) .

Iuri HA, et al. (2025) Unveiling high solifuge diversity: Review of the genus *Pseudocleobis* Pocock, 1900 (Ammotrechidae) in Chile with the description of nine new species. *PloS one*, 20(1), e0309776.

Efe E, et al. (2025) High-fidelity steganography in EEG signals using advanced transform-based methods. *PeerJ. Computer science*, 11, e2900.

Fuentes Huertas B, et al. (2025) Unveiling Challenges Hindering the Growth of Home Dialysis in Finland: Insights From 40 Years of Experience. *Hemodialysis international. International Symposium on Home Hemodialysis*, 29(3), 275.

Kumar ST, et al. (2025) Breed-specific differences of gut microbiota and metabolomic insights into fat deposition and meat quality in Chinese Songliao Black Pig and Large White × Landrace Pig Breeds. *BMC microbiology*, 25(1), 334.

Zhang T, et al. (2024) Integrative proteome and metabolome analyses reveal molecular basis of the tail resorption during the metamorphic climax of *Nanorana pleskei*. *Frontiers in cell and developmental biology*, 12, 1431173.

Crowther LM, et al. (2023) Metabolomics analysis of antiquitin deficiency in cultured human cells and plasma: Relevance to pyridoxine-dependent epilepsy. *Journal of inherited metabolic disease*, 46(1), 129.

Trujillo L, et al. (2023) Cytotoxic Activity of Amaryllidaceae Plants against Cancer Cells: Biotechnological, In Vitro, and In Silico Approaches. *Molecules (Basel, Switzerland)*, 28(6).

Gu X, et al. (2023) Probing long COVID through a proteomic lens: a comprehensive two-year longitudinal cohort study of hospitalised survivors. *EBioMedicine*, 98, 104851.

Khalaf HI, et al. (2022) The Effects of Pin Profile on HDPE Thermomechanical Phenomena during FSW. *Polymers*, 14(21).

Chasapi SA, et al. (2022) NMR-Based Metabolomics in Differential Diagnosis of Chronic Kidney Disease (CKD) Subtypes. *Metabolites*, 12(6).

Mathis T, et al. (2022) Untargeted plasma metabolomics identifies broad metabolic perturbations in glycogen storage disease type I. *Journal of inherited metabolic disease*, 45(2), 235.

Demard EP, et al. (2021) Re-description of seven predatory mite species of family Phytoseiidae (Acari: Mesostigmata) sourced from Florida citrus groves. *PloS one*, 16(8), e0255455.

Ol?re? E, et al. (2021) Double-Cross-Linked Networks Based on Methacryloyl Mucin. *Polymers*, 13(11).

Chen Z, et al. (2020) Lipidomic profiling of dairy cattle oocytes by high performance liquid chromatography-high resolution tandem mass spectrometry for developmental competence markers. *Theriogenology*, 144, 56.

Wilkinson DJ, et al. (2020) Untargeted metabolomics for uncovering biological markers of human skeletal muscle ageing. *Aging*, 12(13), 12517.

Tian W, et al. (2020) Immune suppression in the early stage of COVID-19 disease. *Nature communications*, 11(1), 5859.

Serafim A, et al. (2020) Bioinspired Hydrogel Coating Based on Methacryloyl Gelatin Bioactivates Polypropylene Meshes for Abdominal Wall Repair. *Polymers*, 12(8).

Ntirandekura JB, et al. (2020) Molecular characterization of *Brucella* species detected in humans and domestic ruminants of pastoral areas in Kagera ecosystem, Tanzania. *Veterinary medicine and science*, 6(4), 711.

Igboeli HA, et al. (2019) Discovery of Primarolides A and B from Marine Fungus *Asteromyces cruciatus* Using Osmotic Stress and Treatment with Suberoylanilide Hydroxamic Acid. *Marine drugs*, 17(8).

Gaude E, et al. (2018) NADH Shuttling Couples Cytosolic Reductive Carboxylation of Glutamine with Glycolysis in Cells with Mitochondrial Dysfunction. *Molecular cell*, 69(4), 581.