

Resource Summary Report

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LION/web

RRID:SCR_017018

Type: Tool

Proper Citation

LION/web (RRID:SCR_017018)

Resource Information

URL: <http://www.lipidontology.com>

Proper Citation: LION/web (RRID:SCR_017018)

Description: Web based ontology enrichment tool for lipidomic data analysis. Used for lipidomics to search for enriched LION-terms in lipidomic subsets. LION-terms contain detailed lipid classification by LIPIDMAPS, biophysical data, lipid functions and organelle associations. Freely accessible in a platform independent way.

Abbreviations: Lipid Ontology (LION)

Synonyms: The Lipid Ontology (LION), Lipid Ontology, Lipid ONtology (LION), Lipid ONtology, LION

Resource Type: web application, software resource, production service resource, service resource, data analysis service, analysis service resource

Defining Citation: [DOI:10.1101/398040](https://doi.org/10.1101/398040)

Keywords: lipid, ontology, enrichment, lipidomic, data, analysis, biophysical

Availability: Free, Freely available

Resource Name: LION/web

Resource ID: SCR_017018

Record Creation Time: 20220129T080333+0000

Record Last Update: 20260803T040737+0000

Ratings and Alerts

No rating or validation information has been found for LION/web.

No alerts have been found for LION/web.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 21 mentions in open access literature.

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

Cerveró-Varona A, et al. (2025) Amniotic epithelial Cell microvesicles uptake inhibits PBMCs and Jurkat cells activation by inducing mitochondria-dependent apoptosis. *iScience*, 28(2), 111830.

Wang N, et al. (2025) Neuronal ABCA7 deficiency aggravates mitochondrial dysfunction and neurodegeneration in Alzheimer's disease. *Alzheimer's & dementia : the journal of the Alzheimer's Association*, 21(3), e70112.

García-Toledo I, et al. (2025) TDP-43 dysregulation impairs cholesterol metabolism linked with myelination defects. *Acta neuropathologica*, 150(1), 23.

Hehner J, et al. (2025) Dengue virus is particularly sensitive to interference with long-chain fatty acid elongation and desaturation. *The Journal of biological chemistry*, 301(3), 108222.

Porto NS, et al. (2025) Exploring 6-aza-2-Thiothymine as a MALDI-MSI Matrix for Spatial Lipidomics of Formalin-Fixed Paraffin-Embedded Clinical Samples. *Metabolites*, 15(8).

Maiorino T, et al. (2025) The Non-Coding Regulatory Variant rs2863002 at chr11p11.2 Increases Neuroblastoma Risk by Affecting HSD17B12 Expression and Lipid Metabolism. *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*, 12(33), e15181.

McElroy JP, et al. (2025) Lung lipids associated with smoking and ECIG use in a cross-sectional study and clinical trial. *Respiratory research*, 26(1), 193.

Li MY, et al. (2025) A self-assembled nano micelle-exosome with high selectivity and penetrability achieves precise intracartilage lipid delivery. *Science advances*, 11(49), eadv8999.

Sun K, et al. (2025) Glycolysis-Derived Lactate Induces ACSL4 Expression and Lactylation to Activate Ferroptosis during Intervertebral Disc Degeneration. *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*, 12(21), e2416149.

Zhang Q, et al. (2024) Serum Metabolomic and Lipidomic Profiling Reveals the Signature for Postoperative Obesity among Adult-Onset Craniopharyngioma. *Metabolites*, 14(6).

Perpiñá-Clérigues C, et al. (2024) Novel insight into the lipid network of plasma extracellular vesicles reveal sex-based differences in the lipidomic profile of alcohol use disorder patients. *Biology of sex differences*, 15(1), 10.

Burks KH, et al. (2024) ANGPTL3 deficiency impairs lipoprotein production and produces adaptive changes in hepatic lipid metabolism. *Journal of lipid research*, 65(2), 100500.

Lewandowski D, et al. (2024) Restoring retinal polyunsaturated fatty acid balance and retina function by targeting ceramide in AdipoR1-deficient mice. *The Journal of biological chemistry*, 300(5), 107291.

Hehner J, et al. (2024) Glycerophospholipid remodeling is critical for orthoflavivirus infection. *Nature communications*, 15(1), 8683.

Banu MA, et al. (2023) A cell state specific metabolic vulnerability to GPX4-dependent ferroptosis in glioblastoma. *bioRxiv : the preprint server for biology*.

Eide M, et al. (2023) Integrative omics-analysis of lipid metabolism regulation by peroxisome proliferator-activated receptor α and β agonists in male Atlantic cod. *Frontiers in physiology*, 14, 1129089.

Green CL, et al. (2022) Sex and genetic background define the metabolic, physiologic, and molecular response to protein restriction. *Cell metabolism*, 34(2), 209.

Gutiérrez Y, et al. (2022) The lipidome of an omnivorous insect responds to diet composition and social environment. *Ecology and evolution*, 12(11), e9497.

Chen Y, et al. (2022) Guide to Metabolomics Analysis: A Bioinformatics Workflow. *Metabolites*, 12(4).

Marczak L, et al. (2021) Mass Spectrometry-Based Lipidomics Reveals Differential Changes in the Accumulated Lipid Classes in Chronic Kidney Disease. *Metabolites*, 11(5).