

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

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: 20260905T132817+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 33 mentions in open access literature.

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

Xia C, et al. (2026) Natural photosynthetic system for restoring homeostasis of animal organelle interaction network. *Nature communications*, 17(1).

Shi Y, et al. (2026) CRISPLD2 Attenuates Intervertebral Disc Degeneration by Suppressing Oxidative Stress-Induced Ferroptosis through the miR-548I-IL17A Axis. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 13(16), e16477.

Matafora V, et al. (2026) BACE2 tunes lipid uptake through lipid transporters shedding supporting cancer cell proliferation. *Journal of experimental & clinical cancer research : CR*.

Kaminska M, et al. (2026) Heterogeneity in lysosomal dynamics and metabolic functions along the kidney proximal tubule. *Nature communications*, 17(1).

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.

Jiang D, et al. (2025) Let-7f-5p Inhibits PRRSV Replication by Regulating Lipid Metabolic Reprogramming in Infected Cells. *Veterinary sciences*, 12(12).

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.

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.

Zhao W, et al. (2025) D-Mannose-Mediated metabolic pathways sustain the molecular signatures of sperm function and fertilization. *Journal of advanced research*, 76, 251.

Iftesum M, et al. (2025) Cardiolipin Remodeling as a Regulatory Switch in Osteogenesis: Insights from Multimodal Metabolic Imaging and Molecular Profiling. *bioRxiv : the preprint server for biology*.

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.

Klag KA, et al. (2024) Low-Iron Diet-Induced Fatty Liver Development Is Microbiota Dependent and Exacerbated by Loss of the Mitochondrial Iron Importer Mitoferrin2. *Nutrients*, 16(12).

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

Bond A, et al. (2024) Broiler breeder putative lipid biomarkers associated with sperm mobility. *Frontiers in physiology*, 15, 1504557.

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.