

Resource Summary Report

Generated by [dkNET](#) on Aug 19, 2026

PhaSepDB

RRID:SCR_024964

Type: Tool

Proper Citation

PhaSepDB (RRID:SCR_024964)

Resource Information

URL: <http://db.phasep.pro/>

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Description: Provides a collection of manually curated phase separation (PS) proteins and Membraneless organelles (MLOs) related proteins. Annotated phase separation-related proteins with droplet states, co-phase separation partners and other experimental information.

Resource Type: database, data or information resource

Defining Citation: [DOI:10.1093/nar/gkac783](https://doi.org/10.1093/nar/gkac783)

Keywords: Membraneless organelles related proteins, collection of manually curated phase separation proteins, phase separation proteins,

Funding: National Key Research and Development Program of China ;
National Natural Science Foundation of China

Availability: Free, Freely available

Resource Name: PhaSepDB

Resource ID: SCR_024964

Record Creation Time: 20240201T171710+0000

Record Last Update: 20260819T044608+0000

Ratings and Alerts

No rating or validation information has been found for PhaSepDB.

No alerts have been found for PhaSepDB.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 36 mentions in open access literature.

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

Zafar A, et al. (2026) Molecular dynamics simulations of intrinsically disordered protein regions enable biophysical interpretation of variant-effect predictors. HGG advances, 7(3), 100618.

You K, et al. (2026) PhaSepDB 3.0: a comprehensive knowledgebase of phase separation-related proteins from AI-assisted curation. Nucleic acids research, 54(D1), D445.

Loh D, et al. (2026) Multiaxial Biophysical Control of Oncogenic Phase Separation by Indoleamines: A Proof-of-Concept Synthesis of Landscape-Level Regulation. Journal of pineal research, 78(4), e70156.

Zafar A, et al. (2025) Molecular dynamics simulations of intrinsically disordered protein regions enable biophysical interpretation of variant effect predictors. bioRxiv : the preprint server for biology.

Pintado-Grima C, et al. (2025) Comprehensive protein datasets and benchmarking for liquid-liquid phase separation studies. Genome biology, 26(1), 198.

Li M, et al. (2025) WDR3 undergoes phase separation to mediate the therapeutic mechanism of Nilotinib against osteosarcoma. Journal of experimental & clinical cancer research : CR, 44(1), 201.

Lim CM, et al. (2025) Organization of the Proteostasis Network of Membraneless Organelles. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 12(33), e00233.

Zhang M, et al. (2025) Phase Separation of PHLDB2 Drives EMT and Tumor Progression in Triple-Negative Breast Cancer. Cancer medicine, 14(23), e71308.

Guo Y, et al. (2025) The role of the MYL12A liquid-liquid phase separation in neutrophil improves the prognosis of acute respiratory distress syndrome: a multi-omics analysis. Frontiers in immunology, 16, 1662680.

Lu H, et al. (2025) Liquid-liquid phase separation-related genes in the immune microenvironment and diagnosis of focal segmental glomerulosclerosis and minimal change disease. Renal failure, 47(1), 2573857.

Zhang B, et al. (2025) Downregulation of PGK1 promotes lipid peroxidation and suppresses proliferation in cervical cancer revealed by liquid-liquid phase separation-related gene signature. BMC cancer, 25(1), 1269.

Wen X, et al. (2025) Liquid-liquid phase separation in gastric cancer: identifying novel biomarkers and therapeutic targets through gene signature analysis. *Frontiers in immunology*, 16, 1620390.

Kong M, et al. (2025) Leveraging diverse liquid-liquid phase separation patterns to predict the prognosis and immunotherapy of pediatric acute myeloid leukemia. *BMC cancer*, 25(1), 1326.

Jia Y, et al. (2025) A phase separation-related gene signature for prognosis prediction and immunotherapy response evaluation in gastric cancer with targeted natural compound discovery. *Discover oncology*, 16(1), 1393.

Hou S, et al. (2024) Machine learning predictor PSPire screens for phase-separating proteins lacking intrinsically disordered regions. *Nature communications*, 15(1), 2147.

Qu M, et al. (2024) Multiple roles of arsenic compounds in phase separation and membraneless organelles formation determine their therapeutic efficacy in tumors. *Journal of pharmaceutical analysis*, 14(8), 100957.

Qiu C, et al. (2024) A Six-Gene Signature Related to Liquid-Liquid Phase Separation for Diagnosis of Alzheimer's Disease. *Actas espanolas de psiquiatria*, 52(6), 759.

Li X, et al. (2024) Role of liquid-liquid phase separation in cancer: Mechanisms and therapeutic implications. *Cancer innovation*, 3(5), e144.

Lv L, et al. (2024) Three Liquid-Liquid Phase Separation-Related Genes Associated with Prognosis in Glioma. *Pharmacogenomics and personalized medicine*, 17, 171.

Yang L, et al. (2024) Phase separation as a possible mechanism for dosage sensitivity. *Genome biology*, 25(1), 17.