

Resource Summary Report

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PatchDock

RRID:SCR_017589

Type: Tool

Proper Citation

PatchDock (RRID:SCR_017589)

Resource Information

URL: <https://bioinfo3d.cs.tau.ac.il/PatchDock/>

Proper Citation: PatchDock (RRID:SCR_017589)

Description: Web server for molecular docking. Performs structure prediction of protein–protein and protein–small molecule complexes. Molecular docking algorithm based on shape complementarity principles.

Resource Type: software application, data access protocol, software resource, web service, simulation software

Defining Citation: [PMID:15980490](#)

Keywords: Molecular, docking, structure, prediction, protein, molecule, shape, complex, bio.tools

Funding: Israel Science Foundation ;
Hermann Minkowski-Minerva Center for Geometry at Tel Aviv University ;
Israeli Ministry of Science ;
National Cancer Institute ;
NIH

Availability: Free, Freely available

Resource Name: PatchDock

Resource ID: SCR_017589

Alternate IDs: biotools:patchdock

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

Record Creation Time: 20220129T080336+0000

Record Last Update: 20260729T044438+0000

Ratings and Alerts

No rating or validation information has been found for PatchDock.

No alerts have been found for PatchDock.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 85 mentions in open access literature.

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

Hassan M, et al. (2025) Unveiling Let-7a's Therapeutic Role in Ewing Sarcoma Through Molecular Docking and Deformation Energy Analysis. *Current issues in molecular biology*, 47(11).

Ezediuno LO, et al. (2025) Developing cancer vaccine with carcinoembryonic antigen and IGF-1R as immunostimulants using immunoinformatics approach. *Korean journal of clinical oncology*, 21(1), 20.

Zheng Y, et al. (2025) Exploring the Efficacy and Target Genes of Atractylodes Macrocephala Koidz Against Alzheimer's Disease Based on Multi-Omics, Computational Chemistry, and Experimental Verification. *Current issues in molecular biology*, 47(2).

Siddiki AZ, et al. (2025) Development of a multi-epitope chimeric vaccine in silico against Babesia bovis, Theileria annulata, and Anaplasma marginale using computational biology tools and reverse vaccinology approach. *PloS one*, 20(1), e0312262.

Das S, et al. (2024) Encapsulation of Apium graveolens essential oil into chitosan nanobiopolymer for protection of stored rice against Fusarium verticillioides and fumonisins contamination. *Heliyon*, 10(9), e29954.

Lee JR, et al. (2024) Advancing Breast Cancer Therapeutics: Targeted Gene Delivery Systems Unveiling the Potential of Estrogen Receptor-Targeting Ligands. *Biomaterials research*, 28, 0087.

Mishra A, et al. (2024) HRAMS Proteomics Insights on the Anti-Filarial Effect of Ocimum sanctum: Implications in Phytochemical-Based Drug-Targeting and Designing. *Proteomes*, 13(1).

Heidari Horestani M, et al. (2024) The clock gene BHLHE40 and atypical CCNG2 control androgen-induced cellular senescence as a novel tumor suppressive pathway in prostate cancer. *Journal of experimental & clinical cancer research : CR*, 43(1), 174.

Cui J, et al. (2023) Glycosylated and Succinylated Macrocyclic Lactones with Amyloid-?-Aggregation-Regulating Activity from a Marine Bacillus sp. *Marine drugs*, 21(2).

Banerjee A, et al. (2023) Emergence of a unique SARS-CoV-2 Delta sub-cluster harboring a constellation of co-appearing non-Spike mutations. *Journal of medical virology*, 95(1), e28413.

Motamedi H, et al. (2023) In silico designing and immunoinformatics analysis of a novel peptide vaccine against metallo-beta-lactamase (VIM and IMP) variants. *PloS one*, 18(7), e0275237.

Ruiz-Ciancio D, et al. (2023) Selection of a novel cell-internalizing RNA aptamer specific for CD22 antigen in B cell acute lymphoblastic leukemia. *Molecular therapy. Nucleic acids*, 33, 698.

Kandhavelu J, et al. (2023) A novel EGFR Inhibitor, HNPMI regulates apoptosis and oncogenesis by modulating BCL-2/BAX and p53 in colon cancer. *British journal of pharmacology*.

Elmetwalli A, et al. (2023) Diarylheptanoids/sorafenib as a potential anticancer combination against hepatocellular carcinoma: the p53/MMP9 axis of action. *Naunyn-Schmiedeberg's archives of pharmacology*, 396(10), 2501.

Jabin D, et al. (2022) T-cell epitope-based vaccine prediction against *Aspergillus fumigatus*: a harmful causative agent of aspergillosis. *Journal, genetic engineering & biotechnology*, 20(1), 72.

Bondarchuk TV, et al. (2022) Quaternary organization of the human eEF1B complex reveals unique multi-GEF domain assembly. *Nucleic acids research*, 50(16), 9490.

Rahmani A, et al. (2022) Applying high throughput and comprehensive immunoinformatics approaches to design a trivalent subunit vaccine for induction of immune response against emerging human coronaviruses SARS-CoV, MERS-CoV and SARS-CoV-2. *Journal of biomolecular structure & dynamics*, 40(13), 6097.

Baughman HER, et al. (2022) An intrinsically disordered transcription activation domain increases the DNA binding affinity and reduces the specificity of NF- κ B p50/RelA. *The Journal of biological chemistry*, 298(9), 102349.

Kadam US, et al. (2022) Identification and structural analysis of novel malathion-specific DNA aptameric sensors designed for food testing. *Biomaterials*, 287, 121617.

Kausar MA, et al. (2022) In Silico Comparative Exploration of Allergens of *Periplaneta americana*, *Blattella germanica* and *Phoenix dactylifera* for the Diagnosis of Patients Suffering from IgE-Mediated Allergic Respiratory Diseases. *Molecules (Basel, Switzerland)*, 27(24).