

Resource Summary Report

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Ligprep

RRID:SCR_016746

Type: Tool

Proper Citation

Ligprep (RRID:SCR_016746)

Resource Information

URL: <https://www.schrodinger.com/ligprep>

Proper Citation: Ligprep (RRID:SCR_016746)

Description: Software tool to correct and optimize the ligands by generating different protonation states, stereochemistry, tautomers, and ring conformations. Used to generate accurate, energy minimized 3D molecular structures.

Abbreviations: Ligprep

Synonyms: LigPrep, LigandPreparation, Ligand preparation

Resource Type: software resource, simulation software, software application

Keywords: correct, optimize, ligand, protonation, stereochemistry, tautomer, conformation, energy, minimized, 3D, molecular, structure

Funding:

Availability: Commercially available

Resource Name: Ligprep

Resource ID: SCR_016746

Record Creation Time: 20220129T080332+0000

Record Last Update: 20250528T061340+0000

Ratings and Alerts

No rating or validation information has been found for Ligprep.

No alerts have been found for Ligprep.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 43 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

Che T, et al. (2024) Structural mechanism of human HCN1 hyperpolarization-activated channel inhibition by ivabradine. *The Journal of biological chemistry*, 300(11), 107798.

Peixoto C, et al. (2024) Discovery of Clinical Candidate GLPG3970: A Potent and Selective Dual SIK2/SIK3 Inhibitor for the Treatment of Autoimmune and Inflammatory Diseases. *Journal of medicinal chemistry*, 67(7), 5233.

Schneider C, et al. (2024) A Novel AMPK Inhibitor Sensitizes Pancreatic Cancer Cells to Ferroptosis Induction. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 11(31), e2307695.

Pedersen CN, et al. (2024) Cryo-EM structure of the dopamine transporter with a novel atypical non-competitive inhibitor bound to the orthosteric site. *Journal of neurochemistry*, 168(9), 2043.

Pietru? W, et al. (2023) Tuning the Biological Activity of PI3K? Inhibitor by the Introduction of a Fluorine Atom Using the Computational Workflow. *Molecules* (Basel, Switzerland), 28(8).

Grychowska K, et al. (2023) Impact of the Substitution Pattern at the Basic Center and Geometry of the Amine Fragment on 5-HT6 and D3R Affinity in the 1H-Pyrrolo[3,2-c]quinoline Series. *Molecules* (Basel, Switzerland), 28(3).

Szczepa?ska K, et al. (2023) Dual Piperidine-Based Histamine H3 and Sigma-1 Receptor Ligands in the Treatment of Nociceptive and Neuropathic Pain. *Journal of medicinal chemistry*, 66(14), 9658.

Pietru? W, et al. (2023) Isomeric Activity Cliffs-A Case Study for Fluorine Substitution of Aminergic G Protein-Coupled Receptor Ligands. *Molecules* (Basel, Switzerland), 28(2).

Grychowska K, et al. (2023) Superiority of the Triple-Acting 5-HT₆R/5-HT₃R Antagonist and MAO-B Reversible Inhibitor PZ-1922 over 5-HT₆R Antagonist Intepirdine in Alleviation of Cognitive Deficits in Rats. *Journal of medicinal chemistry*, 66(21), 14928.

Lettl C, et al. (2023) Selective killing of the human gastric pathogen *Helicobacter pylori* by mitochondrial respiratory complex I inhibitors. *Cell chemical biology*, 30(5), 499.

Jahid S, et al. (2022) Structure-based design of CDC42 effector interaction inhibitors for the treatment of cancer. *Cell reports*, 39(1), 110641.

Anju A, et al. (2022) Virtual screening of quinoline derived library for SARS-COV-2 targeting viral entry and replication. *Journal of biomolecular structure & dynamics*, 40(18), 8464.

Wang Y, et al. (2022) Scutellarein attenuates atopic dermatitis by selectively inhibiting transient receptor potential vanilloid 3 channels. *British journal of pharmacology*, 179(20), 4792.

Staro J, et al. (2021) Tuning the activity of known drugs via the introduction of halogen atoms, a case study of SERT ligands - Fluoxetine and fluvoxamine. *European journal of medicinal chemistry*, 220, 113533.

Montanari S, et al. (2021) New Coumarin Derivatives as Cholinergic and Cannabinoid System Modulators. *Molecules (Basel, Switzerland)*, 26(11).

Sun K, et al. (2021) Saikosaponin D exhibits anti-leukemic activity by targeting FTO/m6A signaling. *Theranostics*, 11(12), 5831.

Muralidharan A, et al. (2021) Identification and characterization of novel candidate compounds targeting 6- and 7-transmembrane μ -opioid receptor isoforms. *British journal of pharmacology*, 178(13), 2709.

Huang T, et al. (2021) Andrographolide prevents bone loss via targeting estrogen-related receptor- α -regulated metabolic adaption of osteoclastogenesis. *British journal of pharmacology*, 178(21), 4352.

Yang Y, et al. (2020) Sitravatinib, a Tyrosine Kinase Inhibitor, Inhibits the Transport Function of ABCG2 and Restores Sensitivity to Chemotherapy-Resistant Cancer Cells in vitro. *Frontiers in oncology*, 10, 700.

Fujimori I, et al. (2020) Discovery of Novel and Highly Selective Cyclopropane ALK Inhibitors through a Fragment-Assisted, Structure-Based Drug Design. *ACS omega*, 5(49), 31984.