

Resource Summary Report

Generated by [ASWG](#) on Aug 3, 2026

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: simulation software, software resource, software application

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

Availability: Commercially available

Resource Name: Ligprep

Resource ID: SCR_016746

Record Creation Time: 20220129T080332+0000

Record Last Update: 20260803T040731+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

Usage and Citation Metrics

We found 48 mentions in open access literature.

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

Pierri M, et al. (2025) Unveiling New Triazoloquinoline-Based PROTACs Designed for the Selective Degradation of the ncBAF Chromatin Remodeling Subunit BRD9. *Chemistry (Weinheim an der Bergstrasse, Germany)*, 31(34), e202404218.

Brindani N, et al. (2025) Tetrahydropyrido[4,3-d]pyrimidines as a new active scaffold for human topoisomerase II inhibitors. *Scientific reports*, 15(1), 19618.

Sut S, et al. (2025) *Hypericum empetrifolium* and *H. lydium* as Health Promoting Nutraceuticals: Assessing Their Role Combining In Vitro In Silico and Chemical Approaches. *Food science & nutrition*, 13(4), e70053.

Motso A, et al. (2025) GRK-biased adrenergic agonists for the treatment of type 2 diabetes and obesity. *Cell*.

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.

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).

Szczepańska 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.

Pietruś 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).

Pietruś 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) 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.

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.

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

Morales-Bayuelo A, et al. (2022) New findings on ligand series used as SARS-CoV-2 virus inhibitors within the frameworks of molecular docking, molecular quantum similarity and chemical reactivity indices. *F1000Research*, 11, 914.

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.

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