

Resource Summary Report

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GLYCAM-Web

RRID:SCR_018260

Type: Tool

Proper Citation

GLYCAM-Web (RRID:SCR_018260)

Resource Information

URL: <http://glycam.org/>

Proper Citation: GLYCAM-Web (RRID:SCR_018260)

Description: Web provides tools for modeling 3D structures of molecules and complexes containing carbohydrates including oligosaccharide conformation modeling and glycoprotein 3D structure modeling. Used to simplify prediction of three dimensional structures of carbohydrates and macromolecular structures involving carbohydrates.

Synonyms: GLYCAM

Resource Type: data or information resource, data access protocol, software resource, web service, topical portal, portal

Keywords: Glycosylated SARS-Cov-2 Spike protein, SARS-Cov-2, SARS-Cov-2 Spike protein, spike protein, 3D structure, carbohydrate, oligosaccharide conformation, modeling, structure modeling, data

Related Condition: COVID-19, COVID19

Funding: NIH

Availability: Free, Freely available

Resource Name: GLYCAM-Web

Resource ID: SCR_018260

Record Creation Time: 20220129T080339+0000

Record Last Update: 20260729T044443+0000

Ratings and Alerts

No rating or validation information has been found for GLYCAM-Web.

No alerts have been found for GLYCAM-Web.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 96 mentions in open access literature.

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

Yang Y, et al. (2025) Structural elucidation and characterization of GH29A α -L-fucosidases and the effect of pH on their transglycosylation. The FEBS journal, 292(3), 653.

Wang Y, et al. (2025) An Experimental and Computational Study on the Effects of Ball Milling on the Physicochemical Properties and Digestibility of a Canna Starch/Tea Polyphenol Complex. Foods (Basel, Switzerland), 14(2).

Grant OC, et al. (2025) Generating 3D Models of Carbohydrates with GLYCAM-Web. bioRxiv : the preprint server for biology.

Kim S, et al. (2025) Glycoscience data content in the NCBI Glycans and PubChem. Analytical and bioanalytical chemistry, 417(5), 865.

Ejby Hansen M, et al. (2025) Uptake of fucosylated type I human milk oligosaccharide blocks by Bifidobacterium longum subsp. infantis. mBio, 16(8), e0036825.

Bakshani CR, et al. (2025) Carbohydrate-active enzymes from Akkermansia muciniphila break down mucin O-glycans to completion. Nature microbiology, 10(2), 585.

Cinar MS, et al. (2025) Molecular mechanisms of immune evasion by host protein glycosylation of a bacterial immunogen used in nucleic acid vaccines. bioRxiv : the preprint server for biology.

Lee S, et al. (2025) Updates implemented in version 4 of the GlyCosmos Glycoscience Portal. Analytical and bioanalytical chemistry, 417(5), 907.

Rui W, et al. (2025) Structural characterization and preliminary functional evaluation of a novel Polysaccharide NS0-1 from Nostoc sphaeroides Kütz. Current research in food science, 11, 101126.

Giulini M, et al. (2025) HADDOCK3: A Modular and Versatile Platform for Integrative Modeling of Biomolecular Complexes. Journal of chemical information and modeling, 65(13), 7315.

Peng S, et al. (2025) Molecular choreography of sludge extracellular polymeric substances-From biomolecule identification to energetics and assembly dynamics. PNAS

nexus, 4(5), pgaf157.

Zhou L, et al. (2025) Dual functional POGases from bacteria encompassing broader O-glycanase and adhesin activities. *Nature communications*, 16(1), 1960.

Liu K, et al. (2025) A glycan foldamer that uses carbohydrate-aromatic interactions to perform catalysis. *Nature chemistry*, 17(6), 883.

Ren Z, et al. (2025) N-glycosylation in the SERPIN domain of the C1-esterase inhibitor in hereditary angioedema. *JCI insight*, 10(4).

Huang C, et al. (2025) Modeling glycans with AlphaFold 3: capabilities, caveats, and limitations. *Glycobiology*, 35(10).

Boushehri S, et al. (2024) O-glycans Expand Lubricin and Attenuate Its Viscosity and Shear Thinning. *Biomacromolecules*, 25(7), 3893.

Gazi I, et al. (2024) LacdiNAc to LacNAc: remodelling of bovine γ -lactalbumin N-glycosylation during the transition from colostrum to mature milk. *Glycobiology*, 34(9).

Paiardi G, et al. (2024) The accomplices: Heparan sulfates and N-glycans foster SARS-CoV-2 spike:ACE2 receptor binding and virus priming. *Proceedings of the National Academy of Sciences of the United States of America*, 121(43), e2404892121.

Bloch Y, et al. (2024) The crystal structure of Nictaba reveals its carbohydrate-binding properties and a new lectin dimerization mode. *Glycobiology*, 34(12).

Schachner LF, et al. (2024) Exposing the molecular heterogeneity of glycosylated biotherapeutics. *Nature communications*, 15(1), 3259.