Resource Summary Report

Generated by NIF on Apr 27, 2025

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

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: 20250426T060705+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 83 mentions in open access literature.

Listed below are recent publications. The full list is available at NIF.

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).

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

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

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 ?-lactalbumin N-glycosylation during the transition from colostrum to mature milk. Glycobiology, 34(9).

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.

Wang D, et al. (2024) Enhanced Surface Accessibility of SARS-CoV-2 Omicron Spike Protein Due to an Altered Glycosylation Profile. ACS infectious diseases, 10(6), 2032.

Xu Z, et al. (2024) O-glycosylation of SARS-CoV-2 spike protein by host O-glycosyltransferase strengthens its trimeric structure. Acta biochimica et biophysica Sinica, 56(8), 1118.

Unione L, et al. (2024) Probing altered receptor specificities of antigenically drifting human H3N2 viruses by chemoenzymatic synthesis, NMR, and modeling. Nature communications, 15(1), 2979.

Wang L, et al. (2024) A novel esterase regulates Klebsiella pneumoniae hypermucoviscosity and virulence. PLoS pathogens, 20(10), e1012675.

Osada N, et al. (2024) Self-regulation of MGAT4A and MGAT4B activity toward glycoproteins through interaction of lectin domain with their own N-glycans. iScience, 27(11), 111066.

Cagnoni AJ, et al. (2024) Exploring galectin interactions with human milk oligosaccharides and blood group antigens identifies BGA6 as a functional galectin-4 ligand. The Journal of biological chemistry, 300(8), 107573.

Nieto-Fabregat F, et al. (2024) Computational toolbox for the analysis of protein-glycan interactions. Beilstein journal of organic chemistry, 20, 2084.

Nieto-Fabregat F, et al. (2024) Molecular recognition of Escherichia coli R1-type core lipooligosaccharide by DC-SIGN. iScience, 27(2), 108792.

Meredith RJ, et al. (2024) MA'AT analysis of the O-glycosidic linkages of oligosaccharides using nonconventional NMR J-couplings: MA'AT and MD models of phi. RSC advances, 14(41), 30286.

Day CJ, et al. (2024) The essential malaria protein PfCyRPA targets glycans to invade erythrocytes. Cell reports, 43(4), 114012.

Stelfox AJ, et al. (2023) Crystal structure and solution state of the C-terminal head region of the narmovirus receptor binding protein. mBio, 14(5), e0139123.

Wang H, et al. (2023) Golgi ?-mannosidases regulate cell surface N-glycan type and ectodomain shedding of the transmembrane protease corin. The Journal of biological chemistry, 299(10), 105211.

Deng B, et al. (2023) Improving the activity and thermostability of PETase from Ideonella sakaiensis through modulating its post-translational glycan modification. Communications biology, 6(1), 39.