

Resource Summary Report

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GlyGen

RRID:SCR_023438

Type: Tool

Proper Citation

GlyGen (RRID:SCR_023438)

Resource Information

URL: <https://www.glygen.org>

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Description: Data integration and dissemination project for carbohydrate and glycoconjugate related data. Computational and informatics resources for glycoscience. Portal provides user-friendly interface that facilitates exploration of glycoscience data from diverse international bioinformatics resources, including National Center for Biotechnology Information (NCBI), UniProt, Protein Data Bank (PDB), UniCarbKB, and GlyTouCan glycan structure repository. Retrieves information from data sources and integrates and harmonizes this data. Includes knowledge about molecular, biophysical and functional properties of glycans, genes, proteins and lipids organized in pathways and ontologies, plus data related to mutation and expression.

Synonyms: GlyGen Portal

Resource Type: data or information resource, portal, project portal

Defining Citation: [PMID:31616925](#), [PMID:32324859](#)

Keywords: Gly-glycobiology Gen-information, glycobiology, glycans molecular properties, glycans biophysical properties, glycans functional properties properties, glycans, genes, proteins, lipids, pathways and ontologies, data, mutation and expression data, carbohydrate and glycoconjugate related data,

Funding: NIGMS 1U01GM125267;
NIGMS R24 GM146616

Availability: Free, Freely available

Resource Name: GlyGen

Resource ID: SCR_023438

Record Creation Time: 20230405T050216+0000

Record Last Update: 20260905T133101+0000

Ratings and Alerts

No rating or validation information has been found for GlyGen.

No alerts have been found for GlyGen.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 20 mentions in open access literature.

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

Jurgens JA, et al. (2026) The Common Fund Data Ecosystem (CFDE). bioRxiv : the preprint server for biology.

Zhang H, et al. (2026) When glycobiology meets inflammasome activation: Insights and implications. Journal of advanced research, 79, 833.

Boottanun P, et al. (2026) A hierarchical lectin-based multimodal workflow for spatial mapping of extracellular matrix glycans in fibrotic hearts. Analytical and bioanalytical chemistry, 418(13), 4125.

Dmitrieva AM, et al. (2025) Aberrations in the glycosylation of receptor tyrosine kinases: A focus on lung adenocarcinoma. CytoJournal, 22, 62.

Jiang Z, et al. (2025) In Vivo engineering of transgenic mice for systemic human neutralizing antibody production against staphylococcal enterotoxin B. Frontiers in immunology, 16, 1679421.

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

Zhang H, et al. (2025) TEMI: tissue-expansion mass-spectrometry imaging. Nature methods, 22(5), 1051.

Ahooyi TM, et al. (2025) The Data Distillery: A Graph Framework for Semantic Integration and Querying of Biomedical Data. bioRxiv : the preprint server for biology.

Chakraborty S, et al. (2024) Combatting cellular immortality in cancers by targeting the shelterin protein complex. Biology direct, 19(1), 120.

Hollingsworth K, et al. (2024) Synthesis and screening of a library of Lewisx deoxyfluoro-analogues reveals differential recognition by glycan-binding partners. *Nature communications*, 15(1), 7925.

Ma W, et al. (2024) CHHM: a Manually Curated Catalogue of Human Histone Modifications Revealing Hotspot Regions and Unique Distribution Patterns. *International journal of biological sciences*, 20(10), 3760.

Martinez K, et al. (2024) Functional implications of glycans and their curation: insights from the workshop held at the 16th Annual International Biocuration Conference in Padua, Italy. *Database : the journal of biological databases and curation*, 2024.

Lisacek F, et al. (2023) Worldwide Glycoscience Informatics Infrastructure: The GlySpace Alliance. *JACS Au*, 3(1), 4.

Abbaali I, et al. (2023) The tubulin database: Linking mutations, modifications, ligands and local interactions. *PloS one*, 18(12), e0295279.

Bedran G, et al. (2023) Unraveling the glycosylated immunopeptidome with HLA-Glyco. *Nature communications*, 14(1), 3461.

Yang W, et al. (2023) Quantitative mapping of the in vivo O-GalNAc glycoproteome in mouse tissues identifies GalNAc-T2 O-glycosites in metabolic disorder. *Proceedings of the National Academy of Sciences of the United States of America*, 120(43), e2303703120.

Silonov SA, et al. (2023) Insights into the Cellular Localization and Functional Properties of TSPYL5 Protein. *International journal of molecular sciences*, 25(1).

Trbojević-Akmačević I, et al. (2022) High-Throughput Glycomic Methods. *Chemical reviews*, 122(20), 15865.

Flevaris K, et al. (2022) Immunoglobulin G N-glycan Biomarkers for Autoimmune Diseases: Current State and a Glycoinformatics Perspective. *International journal of molecular sciences*, 23(9).

McQuillan AM, et al. (2019) Natural and Synthetic Sialylated Glycan Microarrays and Their Applications. *Frontiers in molecular biosciences*, 6, 88.