Resource Summary Report

Generated by FDI Lab - SciCrunch.org on Apr 17, 2025

GlyTorsion

RRID:SCR_001568
Type: Tool

Proper Citation

GlyTorsion (RRID:SCR_001568)

Resource Information

URL: http://www.glycosciences.de/tools/glytorsion/

Proper Citation: GlyTorsion (RRID:SCR_001568)

Description: Service that performs a statistical analysis of carbohydrate torsion angles derived from the Protein Data Bank. Such as protein conformation can be described by the backbone torsion angles, a carbohydrate structure is mainly characterised by its linkage torsions. With the aid of pdb2linucs, a dataset of carbohydrate torsion angles was derived from from carbohydrate structures found in the PDB. This weekly updated dataset contains, besides linkage torsions, also ring torsions, omega torsions, N-acetyle group torsions and sidechain torsions of Asn residues involved in Glycan bonds. It can be queried by GlyTorsion.

Abbreviations: GlyTorsion

Synonyms: GlyTorsion: Analysis of Carbohydrate Torsion Angles found in the Protein Data Bank (PDB)

Resource Type: data analysis service, data set, data or information resource, analysis service resource, production service resource, service resource

Defining Citation: PMID:15608187

Keywords: carbohydrate, torsion angle, torsion, angle, linkage torsion, ring torsion, omega torsion, n-acetyle group torsion, sidechain torsion, asn residue, glycan bond, statistical analysis

Funding: DFG

Availability: Acknowledgement requested

Resource Name: GlyTorsion

Resource ID: SCR_001568

Alternate IDs: nlx_152881

Record Creation Time: 20220129T080208+0000

Record Last Update: 20250417T065049+0000

Ratings and Alerts

No rating or validation information has been found for GlyTorsion.

No alerts have been found for GlyTorsion.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 4 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.

Frank M, et al. (2014) Immunoglobulin G1 Fc domain motions: implications for Fc engineering. Journal of molecular biology, 426(8), 1799.

Lütteke T, et al. (2012) The use of glycoinformatics in glycochemistry. Beilstein journal of organic chemistry, 8, 915.

Lütteke T, et al. (2009) Analysis and validation of carbohydrate three-dimensional structures. Acta crystallographica. Section D, Biological crystallography, 65(Pt 2), 156.

Xu D, et al. (2009) Distinct glycan topology for avian and human sialopentasaccharide receptor analogues upon binding different hemagglutinins: a molecular dynamics perspective. Journal of molecular biology, 387(2), 465.