## **Resource Summary Report**

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# **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 or information resource, data analysis service, service resource, data set, analysis service resource, production 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:** 20250521T060801+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 dkNET.

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.