

Complex carbohydrate analysis - Glycan signatures

-Surface glycome profiling

Micro-challenge tests

GLYcoDiag is a French company specialized in glycobiology and glycoanalysis services and products for the biotech, pharma, veterinary, cosmetic and diagnostic industries. Our unique experience provides the services and products needed to speed up your projects in glycoconjugate analysis and control, therapeutic recombinant glycoprotein development, biomarker identification and drug discovery.

Strategy

GLYcoDiag technology platform combines **glycoprofiling and glycoanalytics methods** for determination of your target molecules and cells.

Lectin microplate technology

With our lectin glycoprofiling technology, you can:

Identify and use glycan signatures of your therapeutic recombinant glycoproteins for in-process reference sample comparison, batch-to-batch monitoring, glycoform specific profiles or immunogen glycan detection.

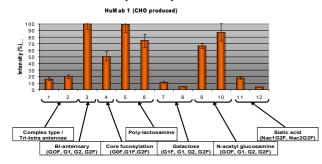
Search and identify **new glycosylation-related drugs** by screening with an innovative range of lectins.

Discover new biomarkers or study specific glycosylation signatures of identified biomarkers.

Run test trials of glycan analysis in research, development projects and quality control process.

Develop a user-specific kit that can be transferred to your laboratory and easily run on your own plate reader.

Reference sample comparison:



Target glycoprofile (tissues, cells, bacteria) Lectin glycoprofiling (Lectin microplate technology) Hit Microbiology tests Cell tests Natural or synthetic compounds glycoprofiles (or mimics) Glycoanalytics (HPAEC, MALDI-MS, RMN)

Glycoform-specific profiles / Batch-to-batch monitoring: Improve your analytics with complementary and relevant method related to conformation, glycan accessibility and overall glycan structures.

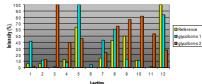
-Surface glycome profiling

-Binding assay

-Glycan signature

-Glycoprofile kits

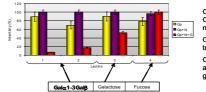
-Glycan accessibility
-Glycan immunogenicity



- In-process monitoring without prior purification. Lectin glycoprofile allows detection of minor changes in glycoform composition.
- Immunogen glycan detection: The combination of glycoanalytics and lectin glycoprofile methods allows a precise detection and/or quantification of your glycoprotein in terms of unwanted glycans.

Examples :

> Galα1-3Galβ1-3/4GlcNAcβ- (porcine xenotransplantation antigen)



Gp = Glycoprotein containing Gala1-3Galb1-3/4GlcNAcbmotifs.

Gp + N = Neuraminidase treated glycoprotein.

Gp + N + G = Neuraminidase and a-galactosidase treated

➤ Neu5Gc: Detection/quantification by HPAEC and specific lectins glycoprofiling.

> α1-3 fucose; β1-2 xylose (plant glycans). Detection/quantification after exoglycosidase digestion by HPAEC and lectin glycoprofiling.

Application fields / customers

Pharmaceutics, cosmetics, veterinary

Drug discovery, vaccines, therapeutic recombinant protein development and in-processs quality control.



Health Diagnostics, food-hygiene, environment Discovery of relevant biomarker.
Glycosylation-based test development.
Polysaccharide analysis of biofilms.

