LEctPROFILE® kits, a relevant tools to study glycosylation pattern of glyco-molecules

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Glycosylation is one of the most important post-translational modifications of proteins: it affects folding, stability, molecular recognition and functionality. According to the regulatory agencies, glycosylation is considered as a critical quality attribute (CQA) regarding the safety and functionality of a biotherapeutic. Indeed, presence of Galα1,3Gal motif and/or NeuGc coming from production in non-human mammalian cell lines can make therapeutic glycoprotein unsafe, triggering an immune response from the human organism. Moreover, it's well established, that glycosylation alterations occur in a large range of diseases such as cancer.

In this context, the understanding, the identification andthe monitoring of glycans signatures of glycoproteins is quite relevant. We have therefore developed dedicated lectin arrays based on the GLYcoDiag's GLYcoPROFILE® technology. Indeed, a relevant selection of lectins canintended either for: 1)detection of desirable or undesirable glycans during the early stages of pre-clinical development but also clinical and QC of biotherapeutics, 2) identification of glyco-biomarkers related to cells behaviour and/or pathology[1], 3) analyse and characterize the glycosylation level of glycoproteins contained in biological fluids[2] or target the sialylation status of relevant serum biomarkers in relationship with 4) research of antagonists for lectins of interest well-known to be involved in particular disorder[3] or in biological mechanisms.

Bibliographic references:

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