Electronic Supplementary Material (ESI) for Reaction Chemistry & Engineering.

Supplementary Information (SI)

Automated Instant Labeling Chemistry Workflow for Real-Time Monitoring of Monoclonal Antibody N-Glycosylation

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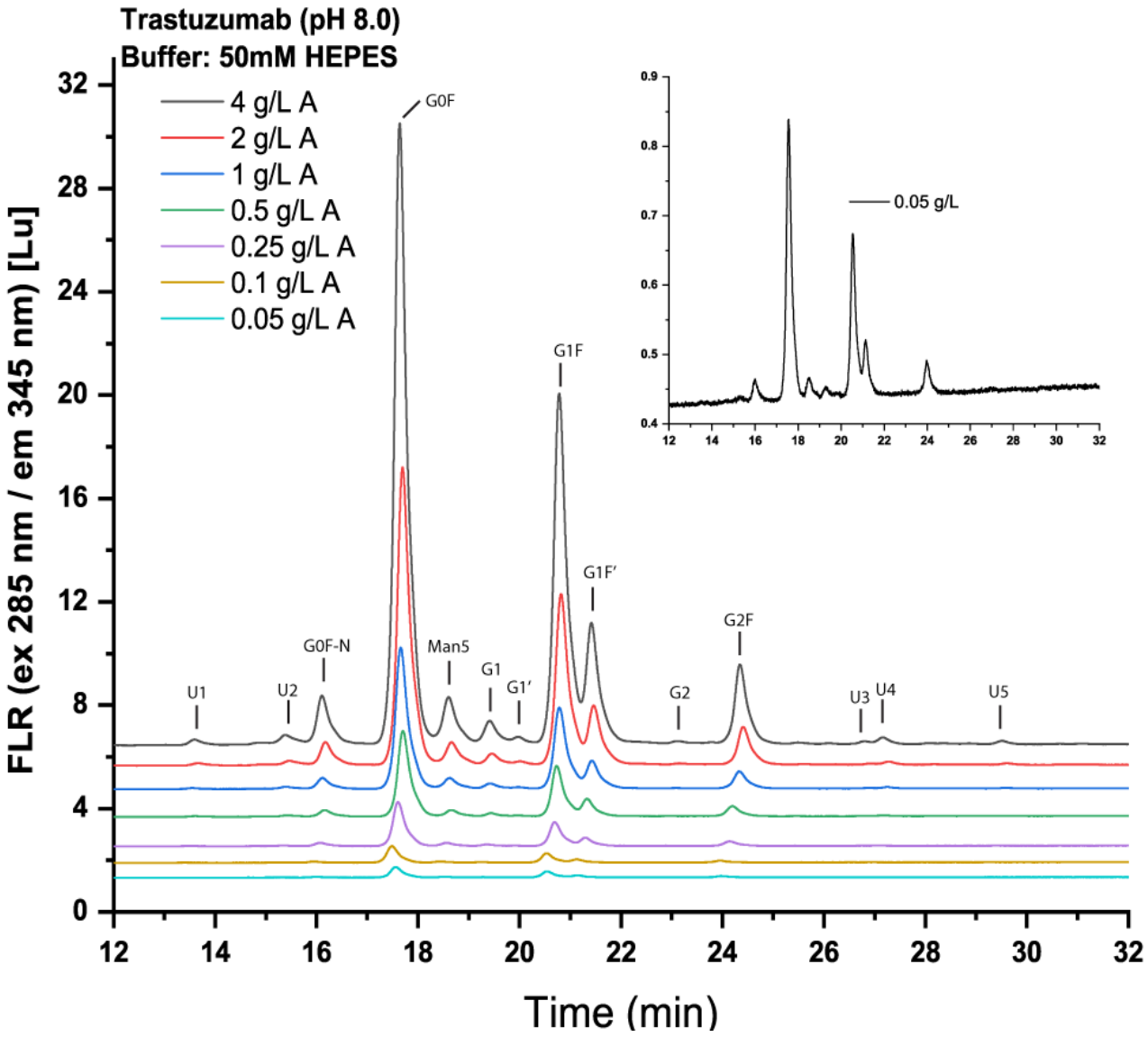
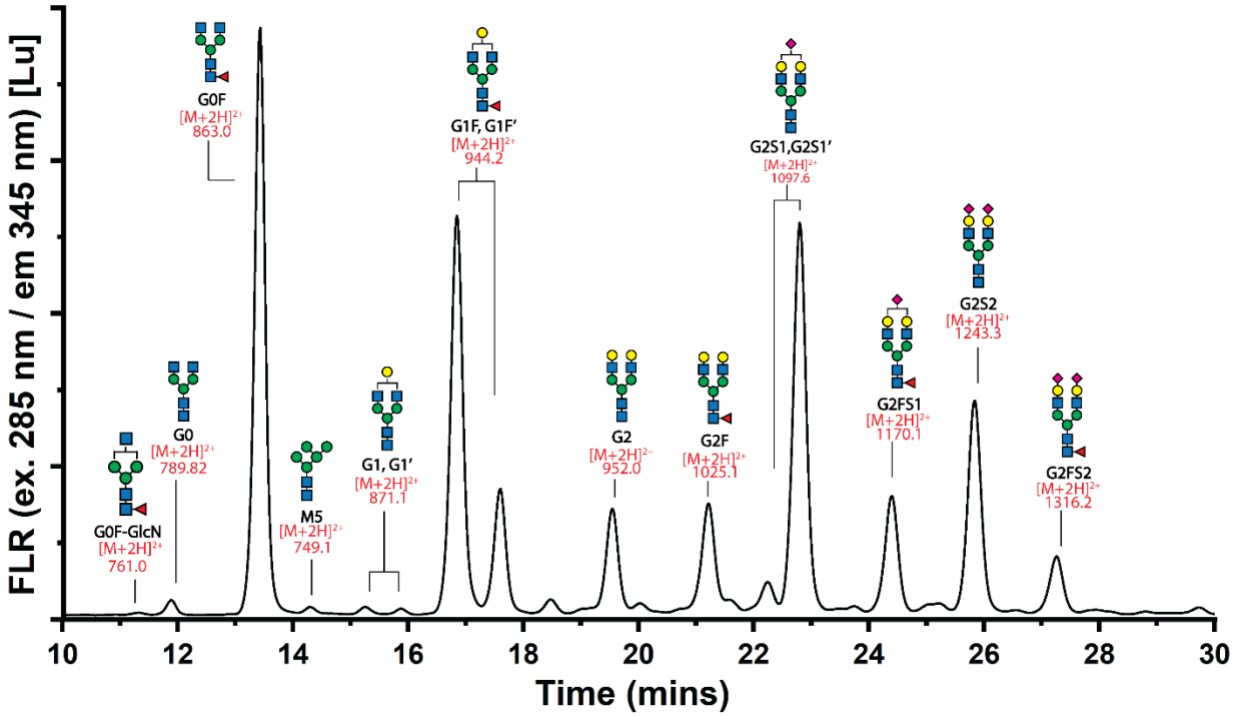
Supplementary figures legend

Supplementary Fig. 1. Sensitivity analysis of Trastuzumab glycosylation using varying concentrations of mAb for analysis. The figure shoes the fluorescence intensity peak areas as a function of concentration between a low limit of detection from mAb at 0.05 g/L to upwards of 4.0 g/L. Samples were prepared from the same 4 g/L stock making dilutions with 50mM HEPES to reach each desired concentration prior to the IPC Kit chemistry sample preparation and analysis. Relative quantitation is possible at the lower concentrations using IPC chemistry.

Supplementary Fig. 2. FLR chromatography of VRC01 neutralizing antibody sample from offline HPLC analysis on LC-MS system but prepared using proposed N-GLYcanyzer system with InstantPC labeling workflow. Proof of concept results that showcase how our automated N-Glycanyzer sample preparation workflow allows for sialylated glycoforms detection. Peaks were identified based on MS analysis as described within the main text. Residence times are different as samples were run on different LC systems.



Supplementary Fig. 1.



Supplementary Fig. 2.