

Table S1. The table illustrates the formulas utilized to calculate derived glycan traits from integrated peaks generated by CGE-LIF and Empower 3 software.

Glycan trait	Description	Calculation
G0	agalactosylation	$P14+P15+P18$
G1	monogalactosylation	$P16+P17+P19+P20+P21+P22+P23+P24$
G2	digalactosylation	$P25+P26+P27$
G	galactosylation (G1+G2)	$P16+P17+P19+P20+P21+P22+P23+P24+P25+P26+P27$
S0	asialylation	$P14+P15+P16+P17+P18+P19+P20+P21+P22+P23+P24+P25+P26+P27$
S1	monosialylation	$P5+P6+P7+P8+P9+P10+P11+P12+P13$
S2	disialylation	$P1+P2+P3+P4$
S	sialylation (S1+S2)	$P1+P2+P3+P4+P5+P6+P7+P8+P9+P10+P11+P12+P13$
CF	fucosylation	$P3+P4+P7+P8+P12+P13+P15+P18+P21+P22+P23+P24+P26+P27$
CF0	afucosylation	$P1+P2+P5+P6+P9+P10+P11+P14+P16+P17+P19+P20+P25$
B	bisecting GlcNAc	$P2+P4+P11+P13+P14+P18+P19+P20+P23+P24+P25+P27$
B0	absence of bisecting GlcNAc	$P1+P3+P5+P6+P7+P8+P9+P10+P12+P15+P16+P17+P21+P22+P26$

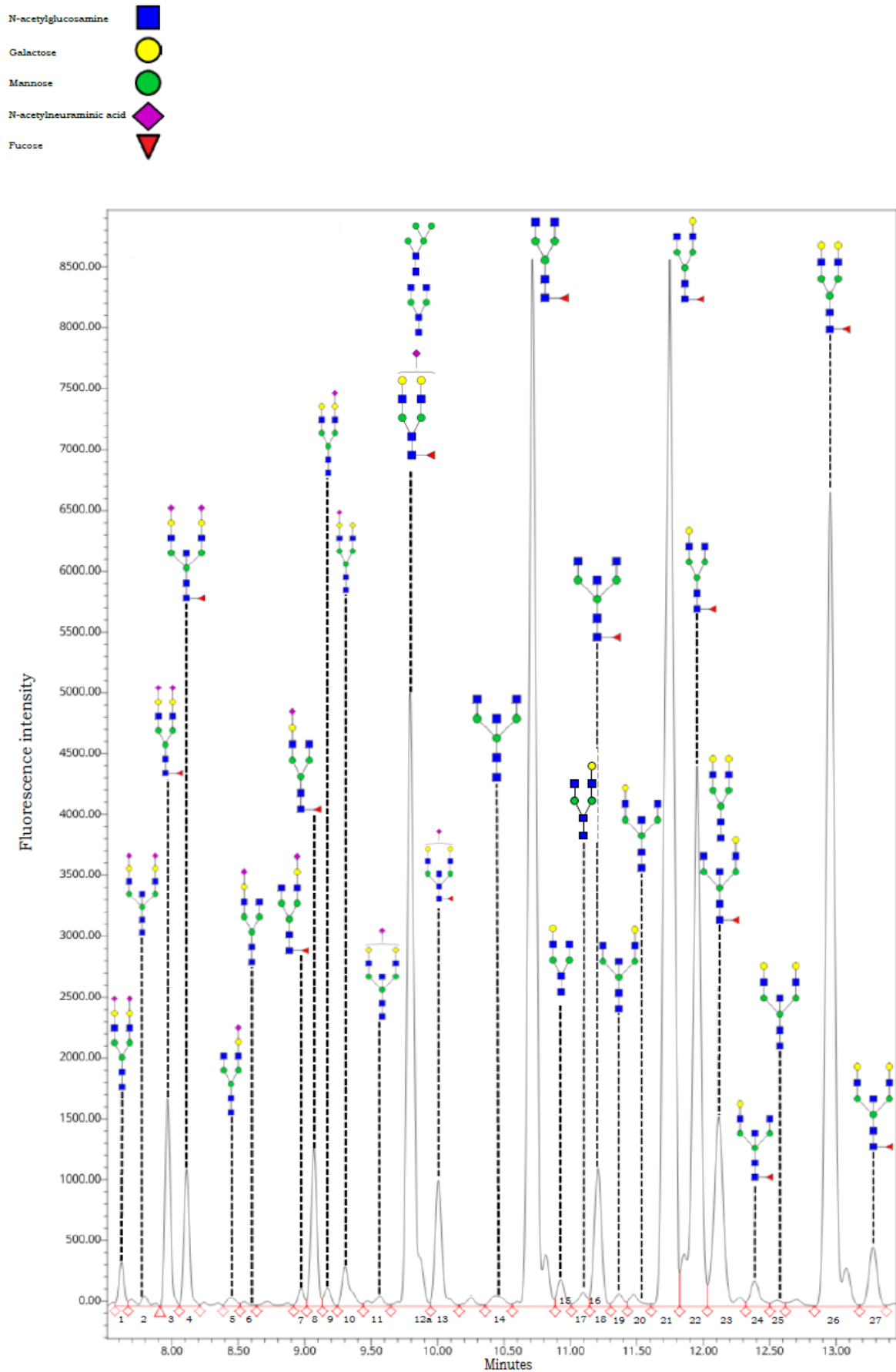


Figure S1. The image depicts the modified integrated glycan profile created using Empower 3 software. Each of the 27 peaks is clearly labelled in sequence, and the glycans associated with each peak are accurately identified.