



Supplemental Figure 6. Analysis of $IM_{Man1A} \times IM_{XylT1A} \times IM_{FucT}$, $IM_{XylT1A} \times IM_{FucT}$ and $IM_{Man1A} \times IM_{XylT1AB}$.

A, For all identified N-glycan compositions, the number of N-glycosites harboring this glycan is shown for $IM_{XylT1A} \times IM_{FucT}$ (light violet) and $IM_{Man1A} \times IM_{XylT1A} \times IM_{FucT}$ (green). The N-glycan complexity is increasing from left (oligomannosidic, not methylated) to right (decorated, methylated). N-glycan compositions were grouped according to the presence of Pent and/or dHex (optional for sugars written in parenthesis). All N-glycosites are taken into account. Peptide sequences and N-glycan compositions attached are listed in Supplemental Data 2. B, Venn diagram for N-glycosites for which the N-glycan composition could be determined for $IM_{XylT1A} \times IM_{FucT}$ and $IM_{Man1A} \times IM_{XylT1A} \times IM_{FucT}$. C, Venn diagram for N-glycosites for which the

N-glycan composition could be determined for $IM_{Man1A} \times IM_{XylT1A}$ and $IM_{Man1A} \times IM_{XylT1AB}$. d, Differences in number of dHex for *N*-glycosites found in both strains were calculated. The legends indicate the total number of *N*-glycosites compared. Some *N*-glycosites harboring multiple *N*-glycoforms could not be assigned to one of the categories (n.a.).