



**Fig. S1. Annotated MALDI-TOF MS spectra of permethylated N-glycans (upper panel) and permethylated  $\beta$ 1,4-galactosyltransferase digested N-glycans (lower panel) from CTB.** Profiles were obtained from the 50% acetonitrile fraction from a C18 Sep-Pak column. All ions are  $[M+Na]^+$ . Putative structures are based on the molecular weight, N-glycan biosynthetic pathway, MS/MS data and enzymatic digestion results. Identical results were obtained when the STB glycans were subjected to the galactosyltransferase reaction.