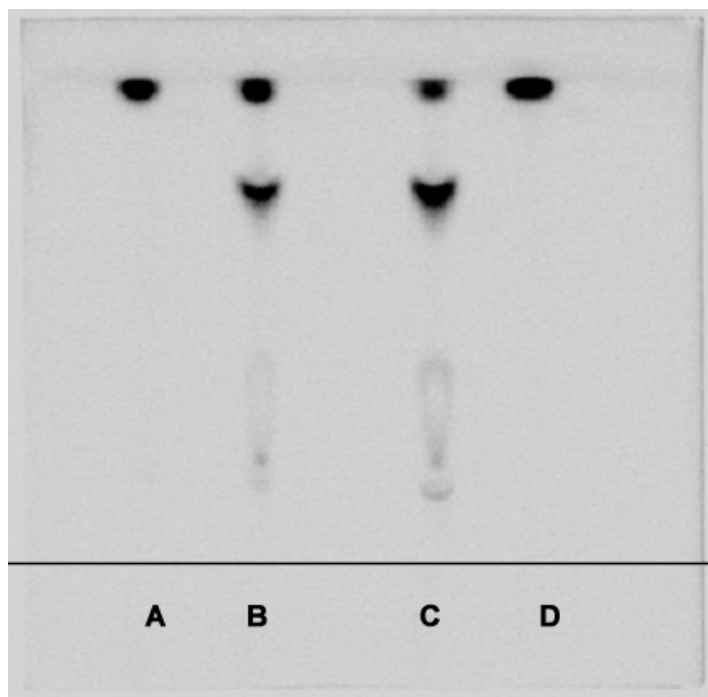




Supplementary Figure 1 Monitoring Cst II catalyzed glycosylation of fluorescent fluorescein lactose conjugate acceptor substrate using *p*-nitrophenyl α -sialoside as an alternative donor substrate in the presence or absence of CMP by TLC (4:2:1:0.1 EtOAc: MeOH: H₂O: AcOH). A - Fluorescein-lactose acceptor substrate (2 mM), *p*-nitrophenyl α -sialoside (6 mM) and Cst II (~0.5 mg/mL). B - Fluorescein-lactose acceptor substrate (2 mM), *p*-nitrophenyl α -sialoside (6 mM), CMP (3 mM) and Cst II (~0.5 mg/mL). C - Fluorescein-lactose acceptor substrate (2 mM), CMP β -D-sialic acid (2 mM), and Cst II (~0.5 mg/mL). D - Fluorescein-lactose acceptor substrate (2 mM), *p*-nitrophenyl α -sialoside (6 mM), CMP (3 mM).