Highly oriented recombinant glycosyltransferases: Site-specific immobilization of unstable membrane proteins by using 

*Staphylococcus aureus* sortase A

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Figure S1. Lineweaver-Burk plots for Mu-GlcNAc as substrate for rhGalTSor. (a) soluble rhGalT. Kinetics parameters Km and Vmax obtained using fitting program were $25.4 \pm 8.4$ µM and $5.31 \pm 0.62$ µmol/min/mg, respectively. (b) immobilized rhGalT. Kinetics parameters Km and Vmax were $54.7 \pm 6.0$ µM and $7.95 \pm 0.41$ µmol/min/mg, respectively.
Figure S2. Lineweaver-Burk plots for GDP-Fuc as substrate for rHFucT. (a) soluble rHFucT. Kinetics parameters Km and Vmax obtained using fitting program were 0.108 ± 0.004 mM and 1.25 ± 0.02 µmol/min/mg, respectively. (b) immobilized rHFucT. Kinetics parameters Km and Vmax were 0.079 ± 0.010 mM and 1.49 ± 0.06 µmol/min/mg, respectively.
Figure S3. Lineweaver-Burk plots for Mu-LacNAc as substrate for rHFucT. (a) soluble rHFucT. Kinetics parameters Km, Ki and Vmax obtained using fitting program were 0.75 ± 0.17 mM, 0.16 ± 0.04 mM and 7.7 ± 1.5 μmol/min/mg, respectively. (b) immobilized rHFucT. Kinetics parameters Km, Ki and Vmax were 0.61 ± 0.22 mM, 0.099 ± 0.038 mM and 9.5 ± 3.0 μmol/min/mg, respectively.