An efficient assay for identification and quantitative evaluation of potential polysialyltransferase inhibitors

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SUPPLEMENTARY FIGURES
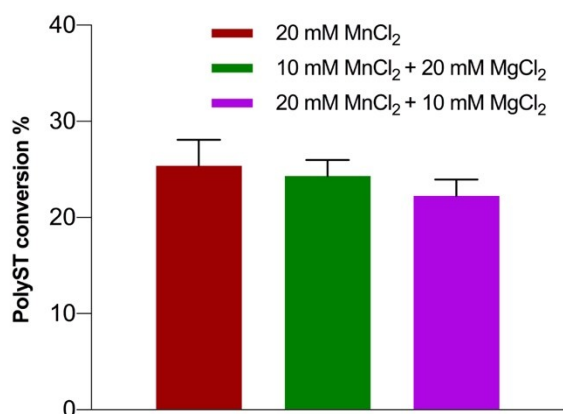
Figure S1. Comparison of polyST enzymatic conversion at 2 h, 25 °C, in the presence of either Mn^{2+} ions alone, or in combination with Mg^{2+} ions. Data plotted are mean values ± SD from 3 independent experiments.
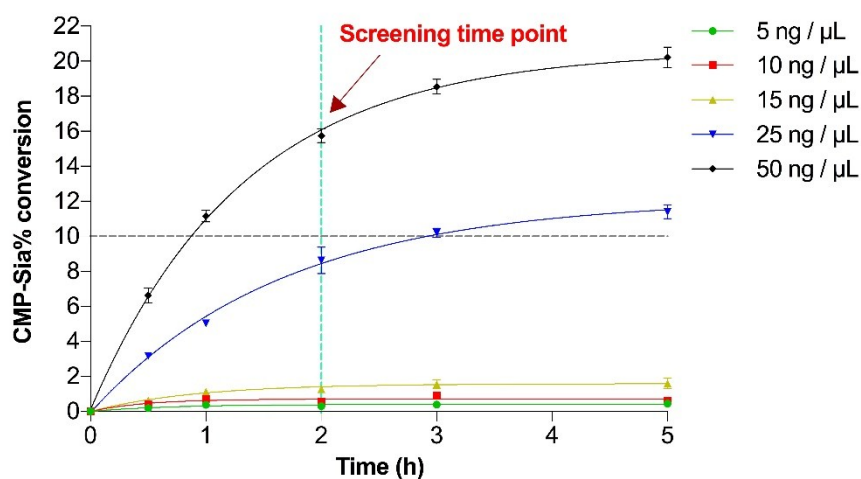

Figure S2. Effect of polyST concentration on conversion of substrate, in the presence of 100 µM CMP-Sia (original K_M at pH 6.7). Data plotted are mean values ± SD from 3 independent experiments.
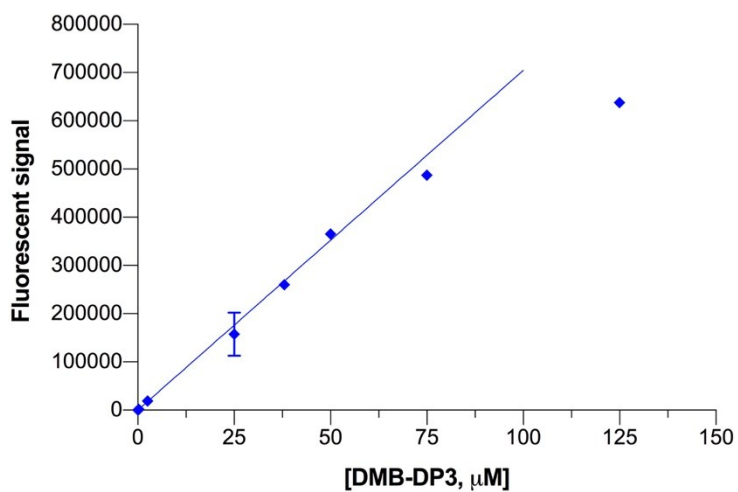
Figure S3. Linearity range analysis of DMB-DP3 in fluorescent detection. Data plotted are mean values ± SD from 3 independent experiments.
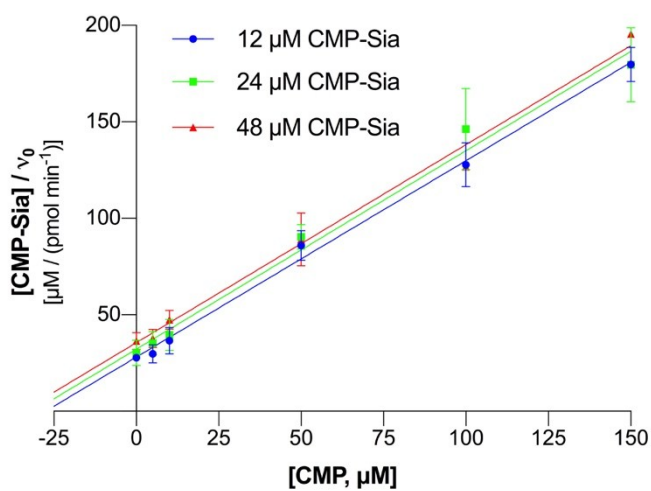
Figure S4. Cornish-Bowden plot for inhibition of polyST by CMP. Data plotted are mean values ± SD from 3 independent experiments.
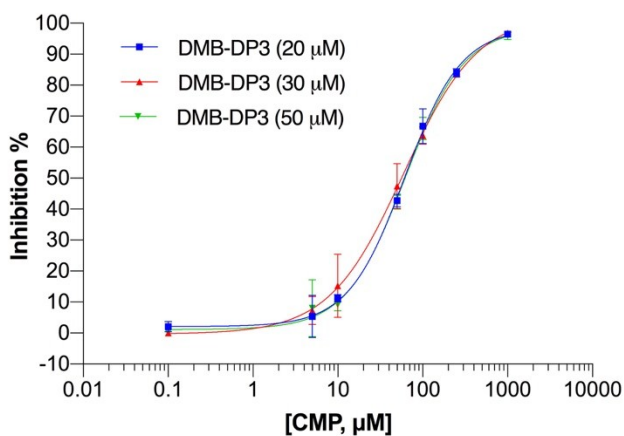
Figure S5. Concentration-dependent inhibition of polyST by CMP in the presence of various acceptor concentrations under the optimised assay conditions (pH 5.8, [S] = K_M). Data plotted are mean values ± SD from 3 independent experiments.
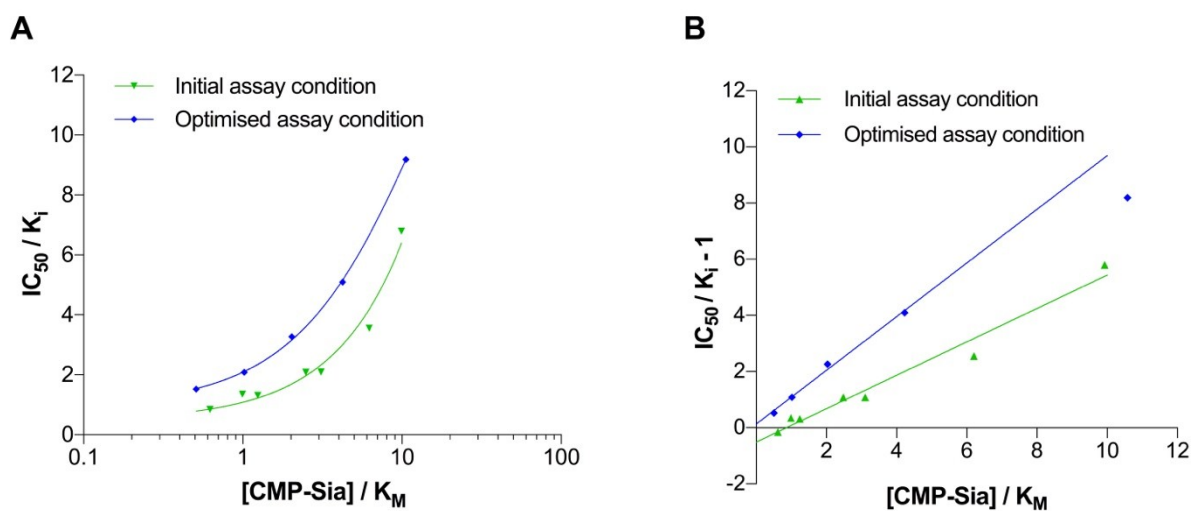
Figure S6. Plots of changes in apparent potencies (IC_{50} values) of CMP as a function of substrate concentration in a semi-log plot (A), and in a linear plot (B), in both initial (green triangles) and optimised (blue squares) assay conditions.