Supporting Information for

Expeditious chemoenzymatic synthesis of CD52 glycopeptide antigens

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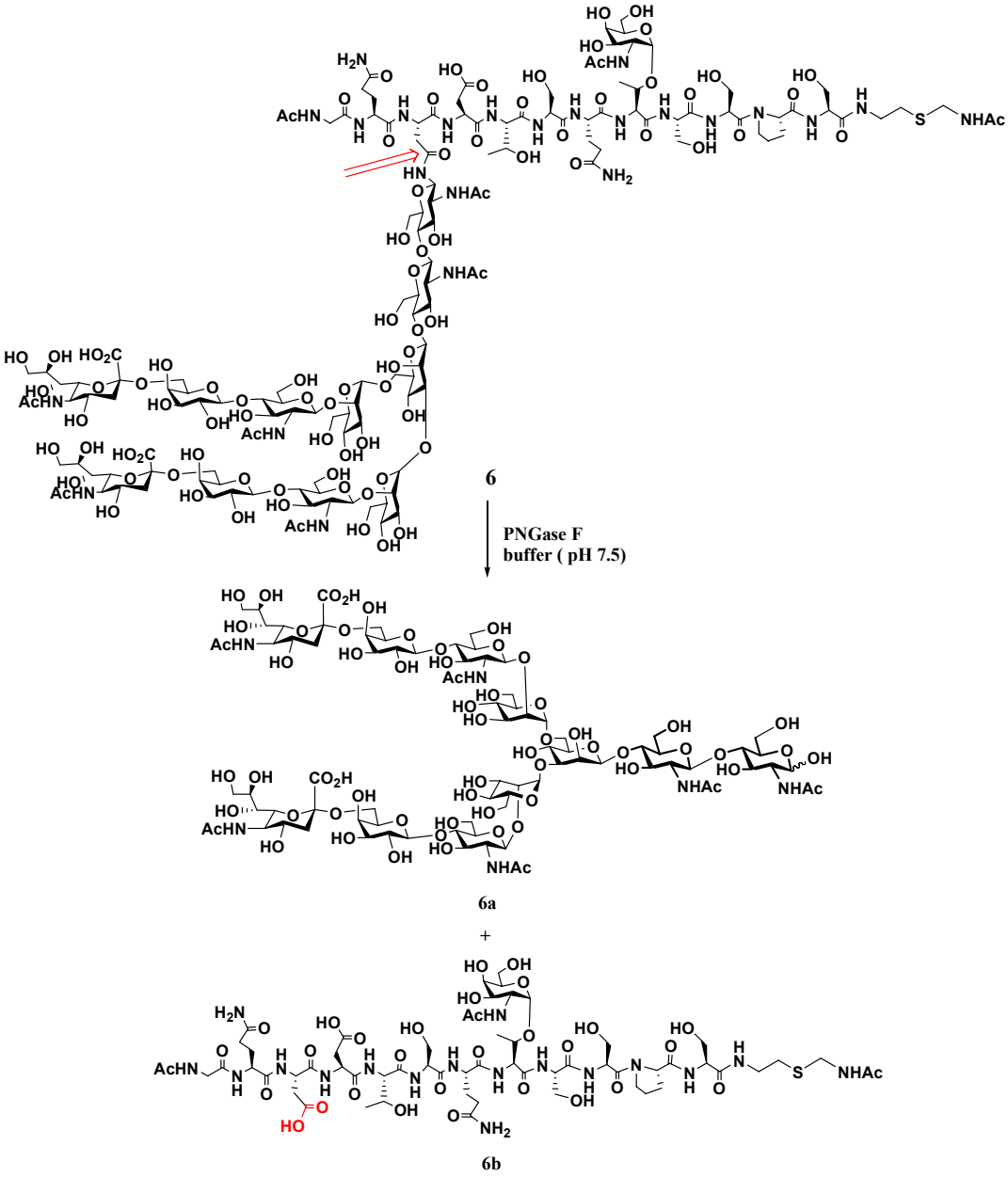
Further characterization of the CD52 glycopeptide 6

Scheme S1



Materials and Methods. PNGase F was purchased from New England Biolabs (Ipswich, MA). The activity of PNGase F was defined as follows: 1 unit of PNGase F is the amount of enzyme required for the hydrolysis of 10 µg of denatured RNase B in one hour at 37 ^{o}C in a total reaction volume of 10 µL. Analytical RP-HPLC was performed on a Waters 626 HPLC instrument with a Symmetry300^{TM} C18 column (5.0 µm, 4.6 × 250 mm) at 40 ^{o}C. The column was eluted with a linear gradient of 0-10% MeCN containing 0.1% TFA within 20

min at a flow rate of 1 mL/min. The ESI-MS Spectra were measured on a Waters Micromass ZQ-4000 single quadruple mass spectrometer.

PNGase F digestion of CD52 glycopeptide 6. A solution of **6** (50 μg) in a phosphate buffer (50 mM, pH 7.5, 20 μL) was incubated at 37 ^{o}C with PNGase F (500 U) for 4 h. The reaction mixture was subject to analytic RP-HPLC to separate the released sialoglycan **6a** and Asp-peptide **6b.** Analytical HPLC of **6a**: t_R = 7.6 min; ESI-MS of **6a**: calculated for $C_{84}H_{138}N_6O_{62}$, M = 2222.78 Da; found (*m/z*), 1112.36 $[M + 2H]^{2+}$. Analytical HPLC of **6b**: t_R = 19.2 min; ESI-MS of **6b**: calculated for $C_{60}H_{97}N_{17}O_{31}S$, M = 1583.63 Da; found (*m/z*), 1584.69 $[M + H]^{+}$, 792.94 $[M + 2H]^{2+}$.