

Supporting information

**Detection of saccharides using HgTe nanostructures in
surface-assisted laser desorption/ionization mass spectrometry**

Ming-Feng Huang and Huan-Tsung Chang*

Department of Chemistry, National Taiwan University, 1, Section 4, Roosevelt Road,

Taipei 106, Taiwan,

Correspondence: Professor Huan-Tsung Chang, Department of Chemistry, National

Taiwan University, 1, Section 4, Roosevelt Road, Taipei 106, Taiwan

Tel/Fax: 011-886-2-33661171.

E-mail: changht@ntu.edu.tw.

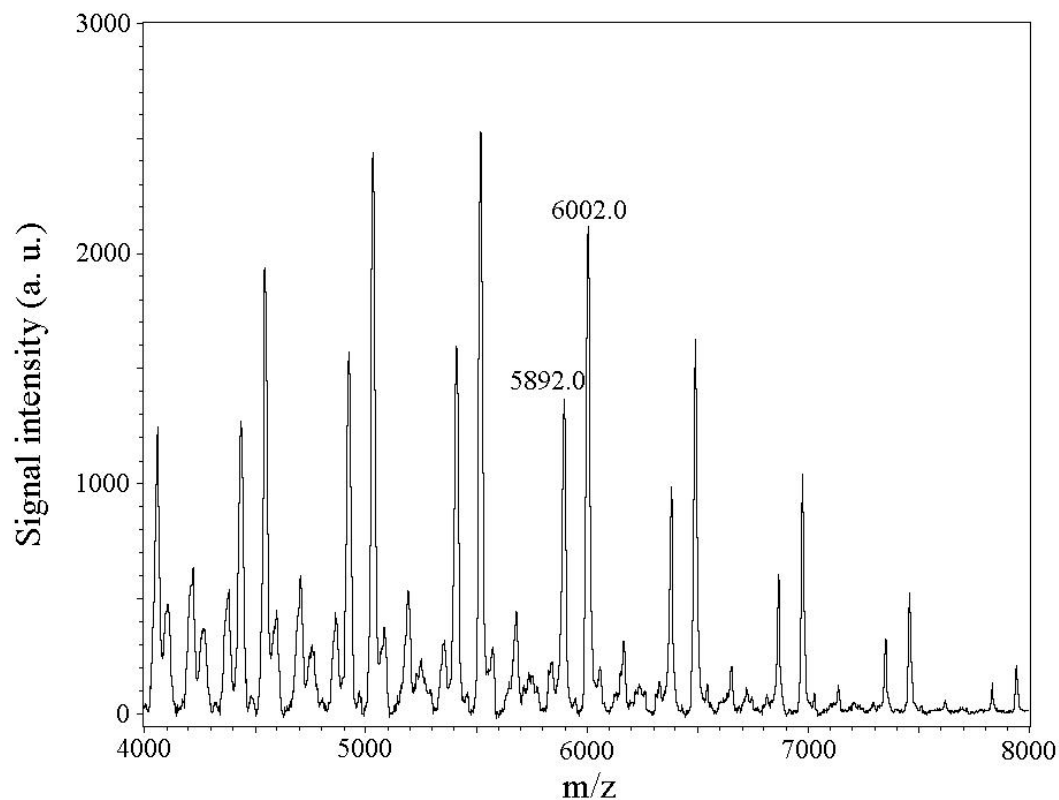


Figure S1. SALDI mass spectrum of PL-6k performed in conjunction with HgTe nanostructures. The concentrations of PL-6k was 10 μM . HgTe nanostructures (1 \times) were prepared in ammonium citrate solution (0.5 mM, pH 7.0) containing 0.1 mM NaCl and 0.1 mM CsCl. The signals at m/z 5892.0, and 6002.0 represent the sodium adduct $[\text{PL-6k} + \text{Na}]^+$ and cesium adduct $[\text{PL-6k} + \text{Cs}]^+$, respectively. A total of 300 pulsed laser shots were applied under a laser fluence of 75 μJ (power density: $2.5 \times 10^9 \text{ W cm}^{-2}$).

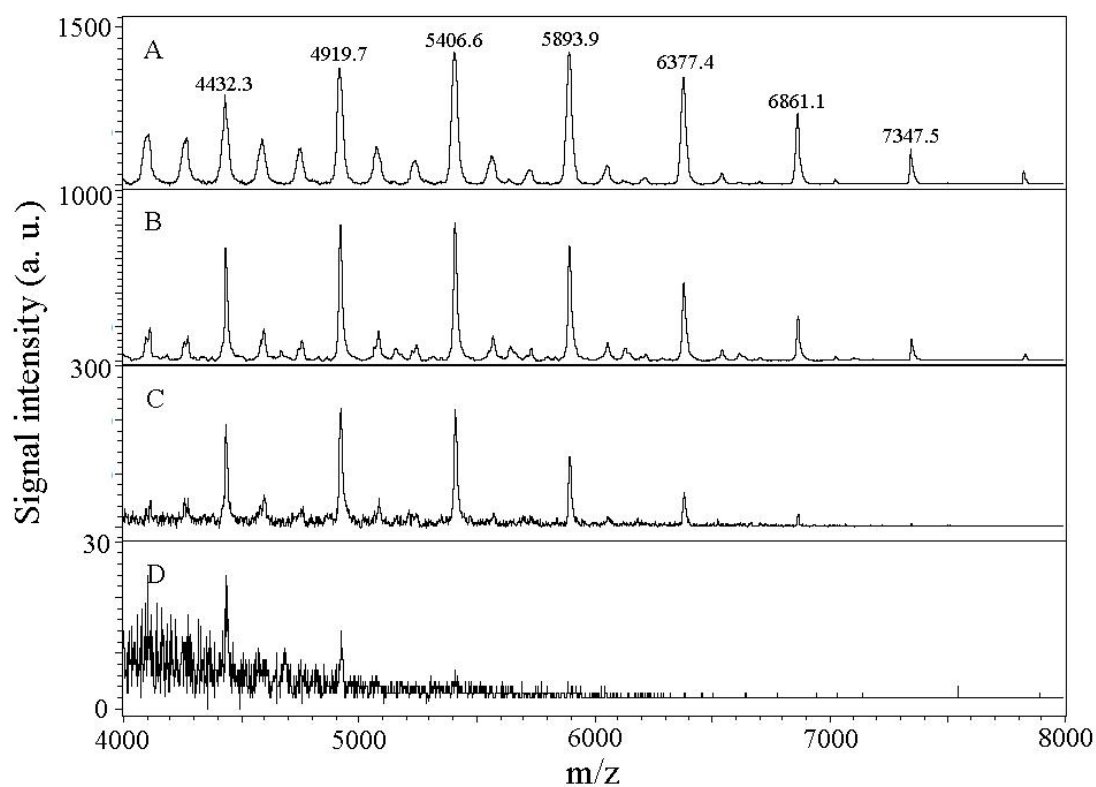


Figure S2. SALDI mass spectra of PL-6k performed in conjunction with HgTe nanostructures. The concentrations of PL-6k were (A) 10 μM ; (B) 1 μM ; (C) 100 nM and (D) 10 nM. HgTe nanostructures (1 \times) were prepared in ammonium citrate (0.5 mM, pH 7.0) containing 0.1 mM NaCl. 300-Pulsed laser shots were applied under a laser fluence of 75 μJ .

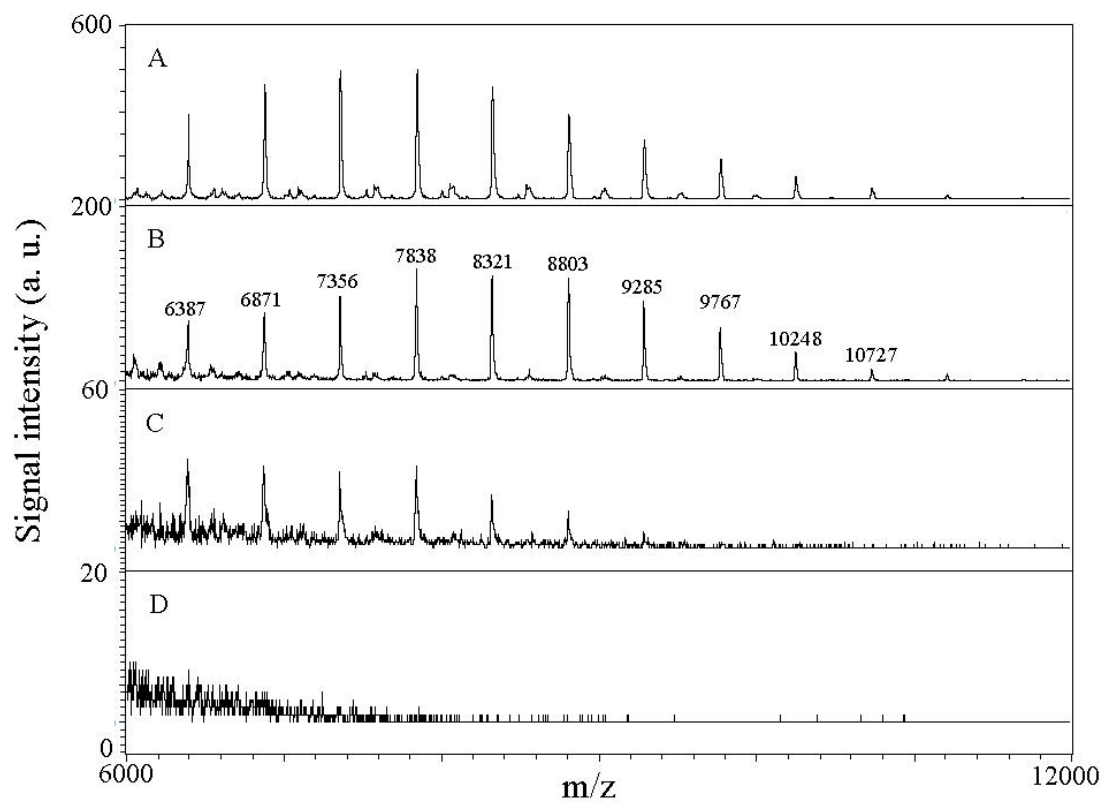


Figure S3. SALDI mass spectra of PL-10k performed in conjunction with HgTe nanostructures. The concentrations of PL-10k were (A) 10 μM ; (B) 1 μM ; (C) 100 nM and (D) 10 nM. HgTe nanostructures (3 \times) were prepared in ammonium citrate solution (50 mM, pH 9.0). 300-Pulsed laser shots were applied under a laser fluence of 120 μJ .