Supporting Information

Nonfaradaic Nanoporous Electrochemistry for Conductometry at High Electrolyte Concentration

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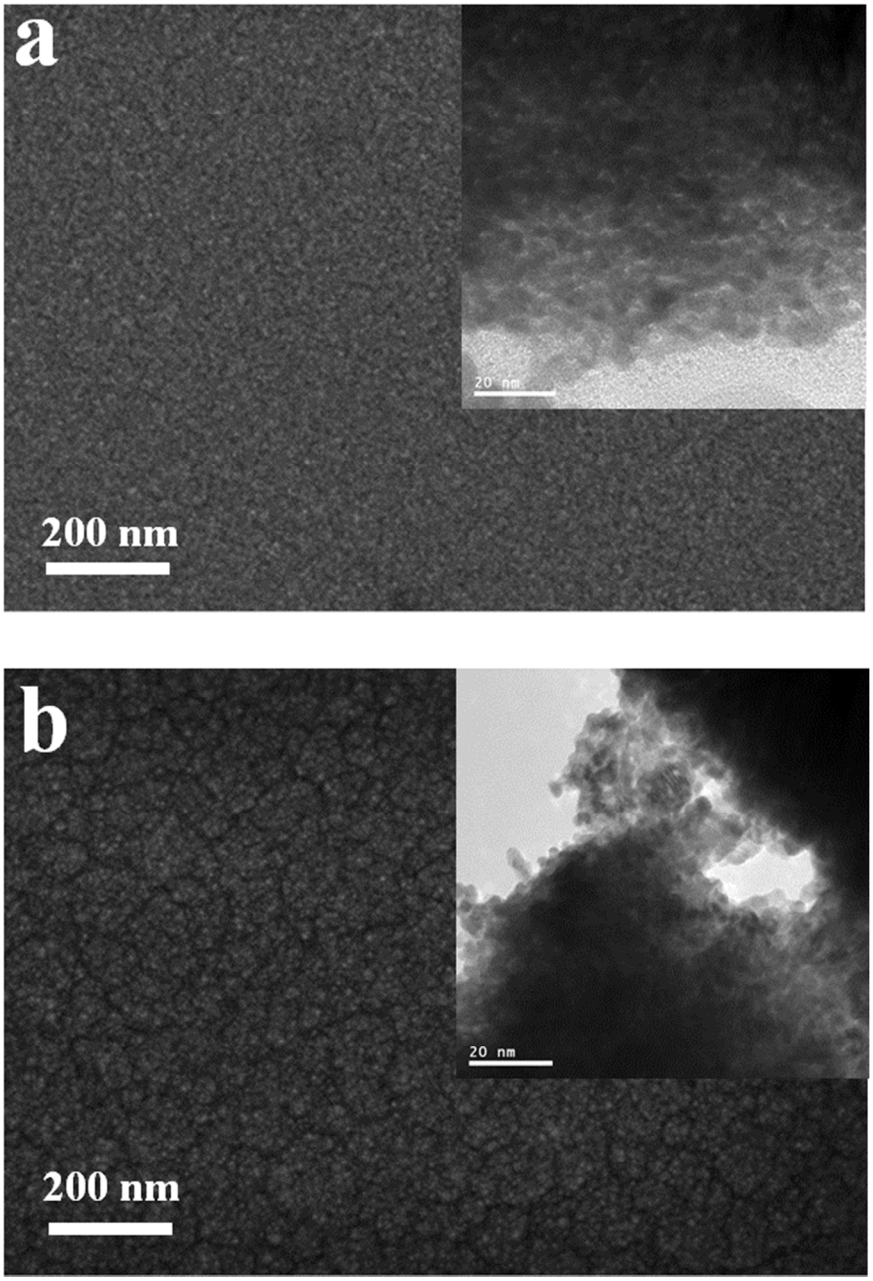

Figure S1. SEM and TEM (inset) images of nanoporous Pt electrodes: (a) L_2-ePt and (b) Pt black.

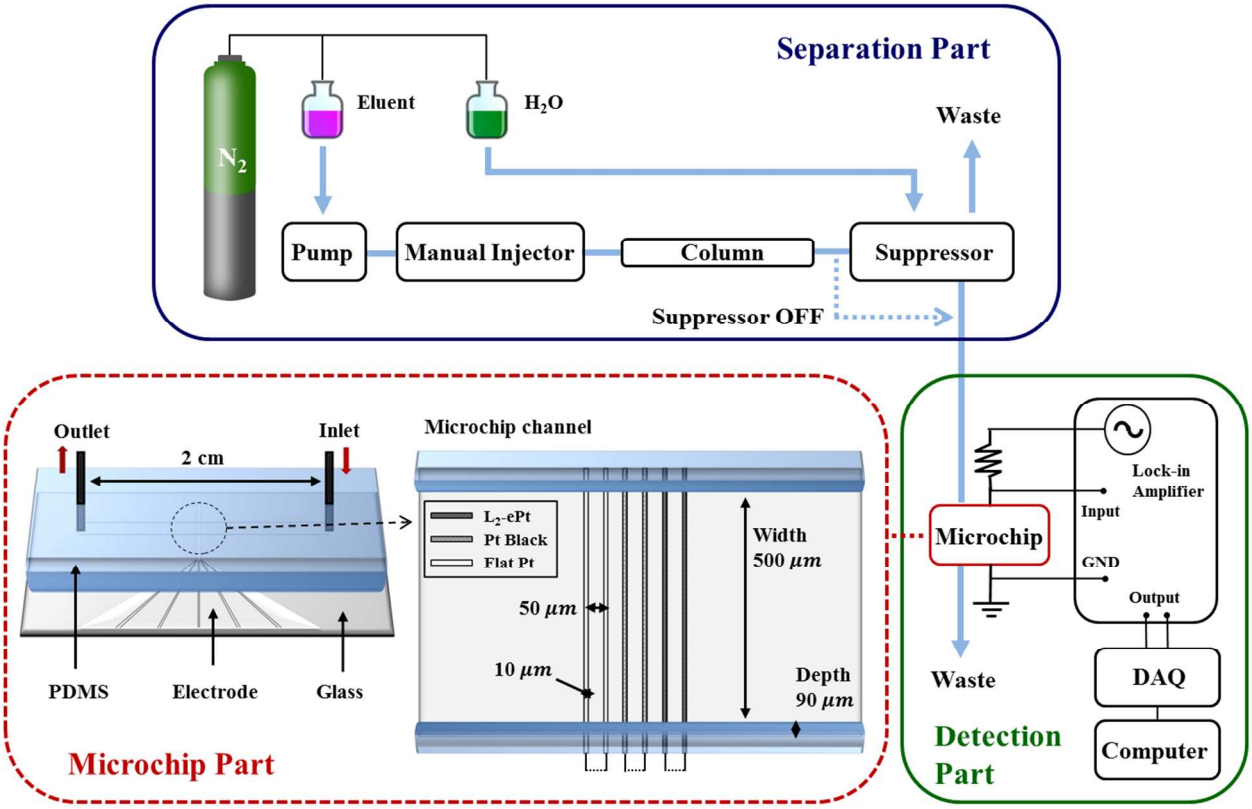

Figure S2. Schematic diagram of the setup used for ion chromatography with microchip-based conductivity detector.

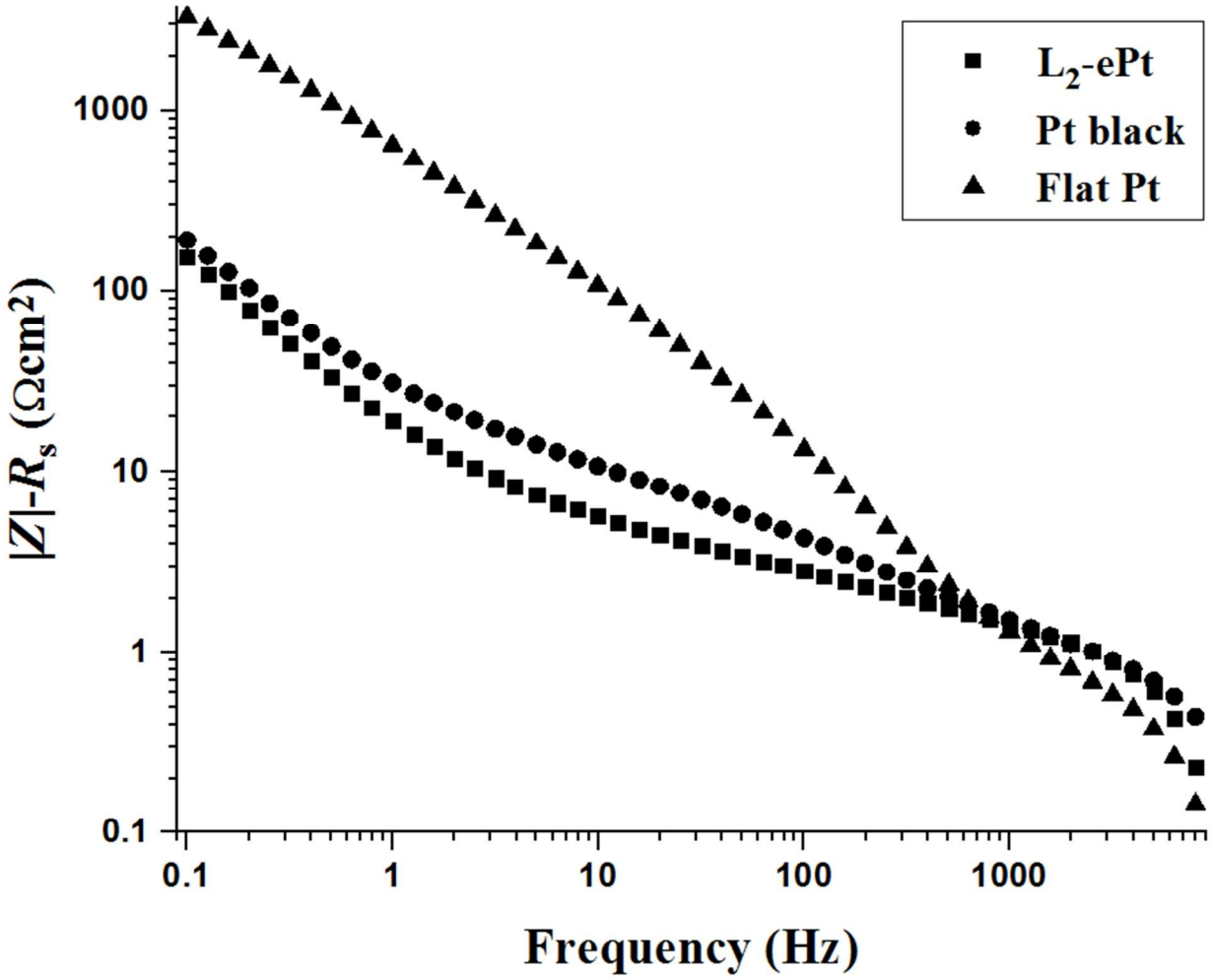

Figure S3. Electrode impedance as a function of frequency in 1 mM NaF solution.

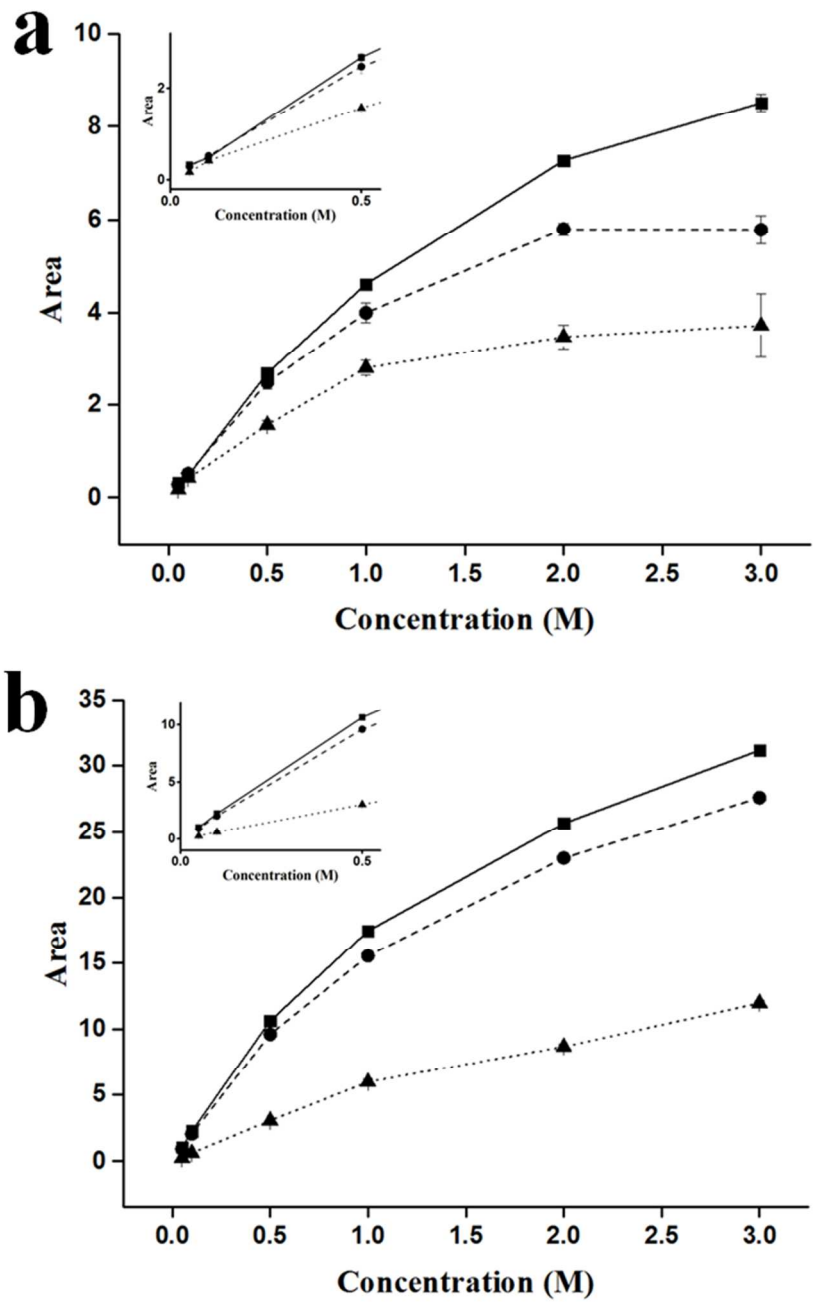

Figure S4. Calibration curves of peak areas for concentration of (a) Cl^- and (b) Na^+ in brine solution from the L_2-ePt (solid line), Pt black (dashed line), and flat Pt (dotted line) electrodes. The conditions for ion chromatography are the same as those for Figure 9. The error bars are based on the standard deviations from four independent measurements for respective points.