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Supporting Information for

Stable electrochemical transistor performance with a low-swelling mixed conducting polymer

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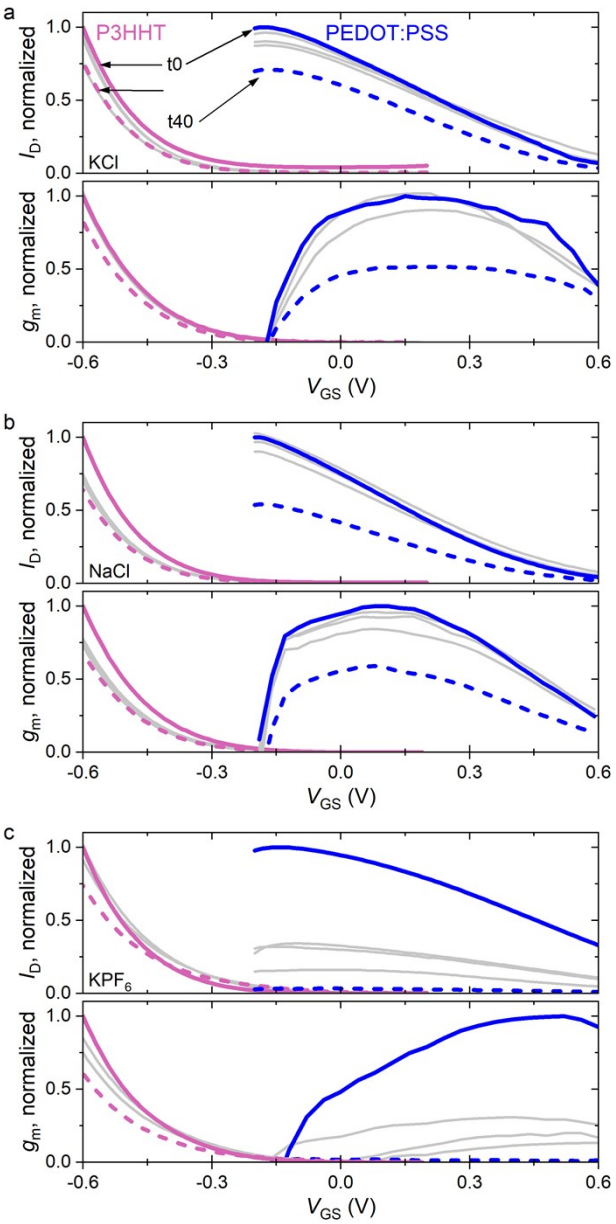

Figure S1. *Normalized drain current (I_{DS}) and transconductance (g_m) traces measured for OECTs with P3HHT or PEDOT:PSS as the active channel material during 40 days of continuous immersion in 0.1 M aqueous solutions of* ***a)*** *KCl,* ***b)*** *NaCl, and* ***c)*** *KPF_6 electrolytes. Traces correspond to initial measurements (t_0, bold solid lines) and measurements done after 10, 20, 30 (solid grey lines), and 40 days (t_{40}, dashed lines) of continuous device immersion. Data are normalized to the maximum value of initial measurements. Devices are operated at a drain voltage ($|V_{DS}|$) of 0.6 V.*

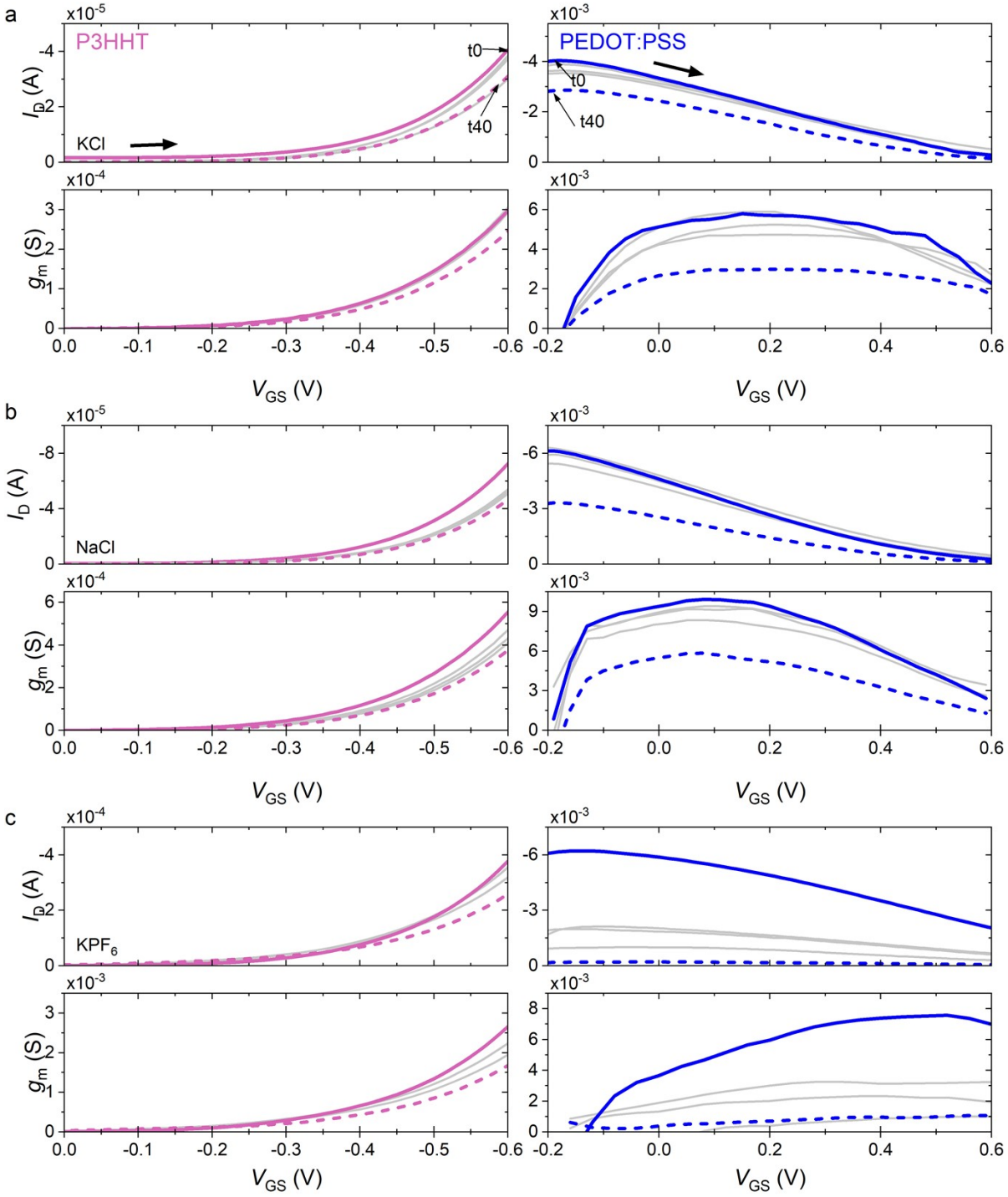

***Figure S2**. Drain current (I_D) and transconductance (g_m) measured for OECTs with P3HHT or PEDOT:PSS as the active channel material during 40 days of continuous immersion in 0.1 M aqueous solutions of **a)** KCl, **b)** NaCl, and **c)** KPF_6 electrolytes. Traces correspond to initial measurements (t_0, bold solid lines) and measurements done after 10, 20, 30 (solid grey lines), and 40 days (t_{40}, dashed lines) of continuous device immersion. Bold arrows show direction of gate potential (V_{GS}) sweep. Devices are operated at a drain voltage ($|V_{DS}|$) of 0.6 V.*