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## Supplemental information

# SNAP23 regulates KCC2 membrane insertion and activity following mZnR/GPR39 activation in hippocampalneurons

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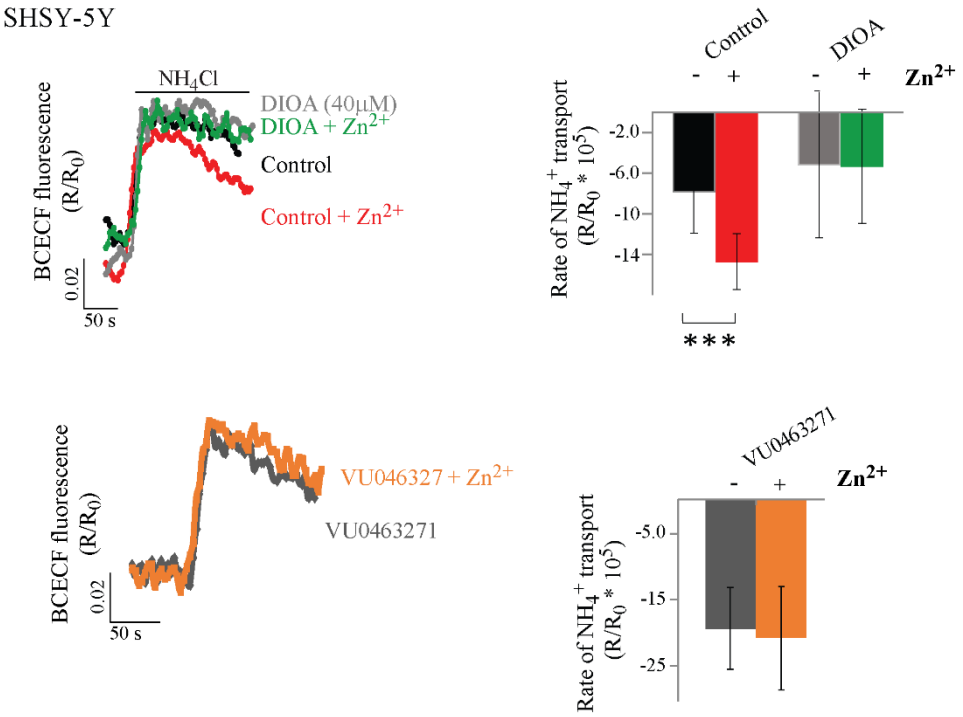
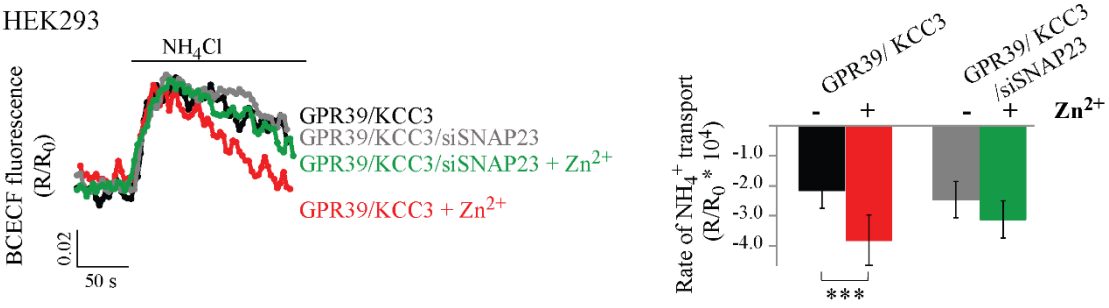
**Figure S1: $NH_4^+$ transport in SHSY-5Y cells is mediated by KCC2. Related to Figure 3A.**




BCECF fluorescent signal traces from SHSY-5Y cells treated with the KCC inhibitor DIOA (40 µM) or VU463271 (10 µM) with and without $Zn^{2+}$. Right panels show averaged rates of $NH_4^+$ transport. (n= at least 6 coverslips per condition, *** p<0.0001, t test).

**Figure S2: Silencing SNAP23 reverses KCC3 upregulation by ZnR/GPR39. Related to Figure 3C-D.**




HEK293 cell were co-transfected with GPR39 and KCC3, and with siRNA scrambled sequence or siSNAP23. $NH_4^+$ transport rates were determined in BCECF loaded cells. Traces of fluorescence signals from cells treated with $Zn^{2+}$ (200 µM, 2 min.) compared to controls are shown. Right panel shows averaged rates of $NH_4^+$ transport, obtained during initial 100 s following maximal signal. (n= at least 6 coverslips for each condition, *** p<0.0001, t test).