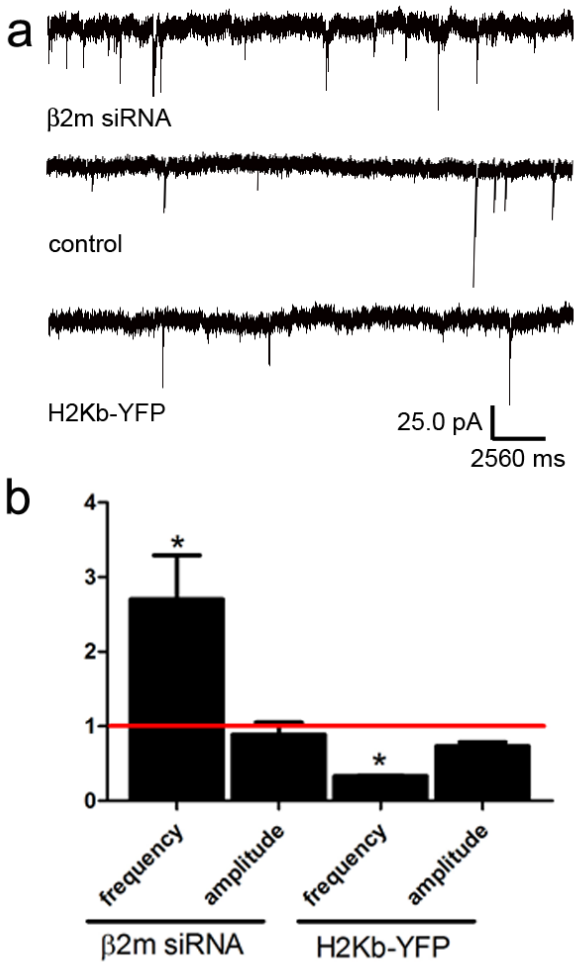

Suppl. Fig. 4. **MHCI bidirectionally regulates the function of GABAergic synapses when recorded using a second, distinct set of conditions.** Because the mIPSCs recorded -40 and -20mV in **Fig. 5** were small and noisy, we performed these experiments again under conditions that cause mIPSCs to be larger in amplitude. Internal and external solutions with close to equal chloride solutions were used to cause chloride to reverse at -18mV and the neurons were voltage-clamped at -70mV for recording. mIPSCs were isolated pharmacologically by including 500 nM TTX, 10 μM CNQX, 50 μM APV in the bath. (**a**) Representative traces from whole-cell patch-clamp recordings of mIPSCs from 8-10 d.i.v. control cultured cortical neurons or neurons transfected with either β2m siRNA or H2-K^b-CFP. Qualitatively, β2m KD increases, and H2-K^b OE decreases, GABAergic synaptic transmission. (**b**) Quantitatively, β2m KD significantly increases mIPSC frequency, while H2-K^b-CFP OE decreases it. Neither manipulation changes mIPSC amplitude. These results are similar to those obtained using the distinct recording paradigm described in Fig. 5. n=9 and 7 for β2m siRNA and NTS, respectively and n=3 each for H2-K^b-CFP OE and GFP controls, * = $p<0.05$.