

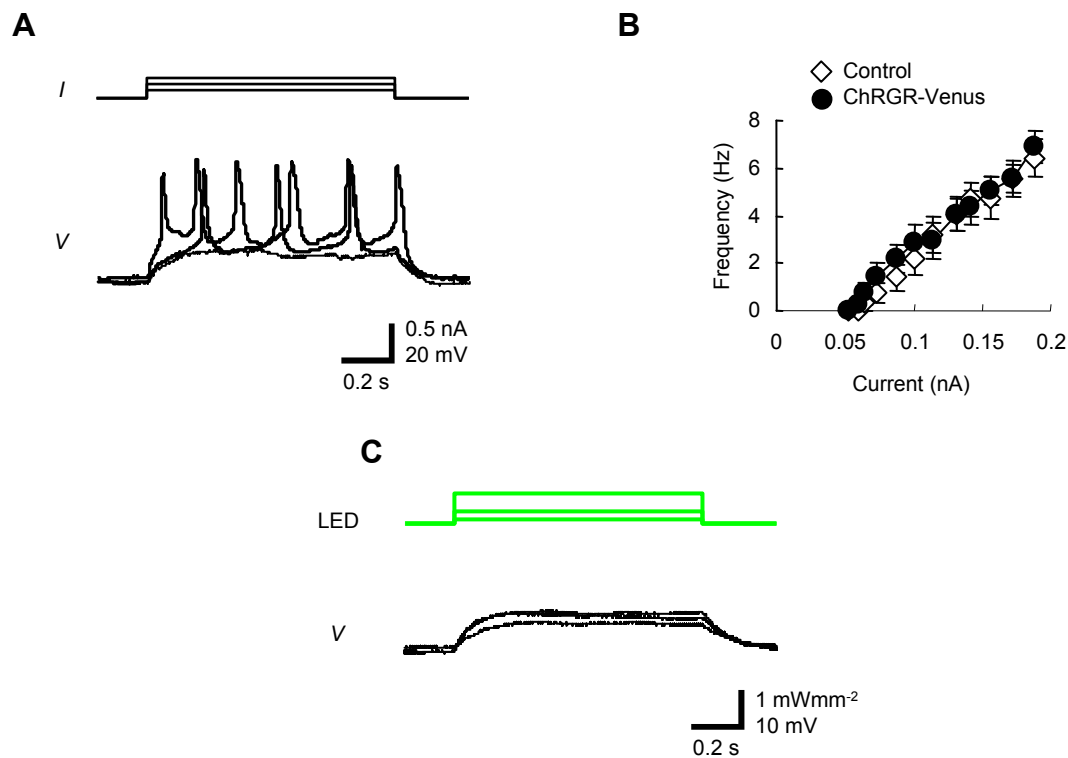
Figure S2

Figure S2. Membrane properties of ChRGR-Venus-expressing neurons. **A.** Membrane potential responses (V , bottom traces) to current injections from the patch electrode (I , top). **B.** Frequency of action potentials as a function of injected current; ChRGR-Venus-expressing neurons and non-expressing controls. **C.** Typical current-clamp responses (V , bottom traces) of a L5 pyramidal neuron to the green LED pulses (top). The external solution included 1 μ M TTX to suppress the generation of action potentials. The relationship between the light power density and the voltage change was non-linear because of the non-linear light power density-photocurrent relationship. The resting potential was -73 mV and the membrane time constant was 104 ms.