**Supplementary Figure 1.** Changes in mEPSC amplitude by visual experience follow the rules of a form of homeostatic synaptic plasticity termed “synaptic scaling”.

(a) Normalized cumulative probability of mEPSC amplitudes in visual cortex neurons from normal-reared (NR: red solid line) and rats dark-reared for 1 week (DR: black solid line). Superimposed on the graph is a cumulative probability of mEPSC amplitudes from NR that are multiplied by a factor (1.2) to match the average mEPSC amplitude to that from DR (NR$_{scaled}$: red dotted line). There was no statistically significant difference between cumulative probability of DR and that of NR$_{scaled}$ (Kolmogorov-Smirnov test: $P > 0.1$). This is consistent with a multiplicative scaling of synaptic strength as proposed by Turrigiano et al. (1998).

(b) Normalized cumulative probability of mEPSC amplitudes in somatosensory cortex neurons from NR (red solid line) and 1 week DR (black solid line). Superimposed on the graph is a cumulative probability of mEPSC amplitudes from NR that are multiplied by a factor (0.8) to match the average mEPSC amplitude to that from DR (NR$_{scaled}$: red dotted line). There was no statistically significant difference in the cumulative probability of DR and that of NR$_{scaled}$ (Kolmogorov-Smirnov test: $P > 0.1$).