



Extended Data Figure 1

***PV*⁺ interneuron manipulation does not affect the preferred orientation.**

(A) The preferred orientation in the control condition is plotted against the preferred orientation in the laser condition, for cells recorded in PVA (*green*) and PVI (*blue*) experiments. Cells along the diagonal line do not change their preferred orientation. Cells along the lines with slope of 1 switched their preferred direction ($\pm 180^\circ$) but not orientation. (B) Distribution of angular distance between the preferred and non-preferred orientation across the cell population, in the control (*black*) and laser (*gray*) conditions.