



Figure 6 - Figure Supplement 1: Calcium responses of CN-33 for each individual.

Calcium activity of CN-33 was imaged *in vivo* (using *SS02108-GAL4* > *UAS-GCamp6f*) in first instar larvae immobilised in a microfluidic device [68] and exposed to the odor EA (**a,b,d**) and/or to optogenetic activation of CsChrimson-expressing KCs (**c,d**). Plots show fluorescence normalized to baseline (before odor presentation). 2 to 4 repeats are done for each individual, thick curve shows the average response of each individual. The left and right curves in **b** show the responses of CN-33 in the same animal to different kinds of stimulations. Averaged curves are also shown in Fig.6b and 6c after smoothing to ease readout.

a. Response of CN-33 to EA in larvae with silenced MB (using *14H06-LexA* > *LexAop-TNTe*). **b.** Response of CN-33 to EA in larvae with intact MB (using *14H06-LexA* > *LexAop-CsChrimson*). **c.** Response of CN-33 to activation of MB (using *14H06-LexA* > *LexAop-CsChrimson*).