



Figure 1 — figure supplement 2. Example of simultaneously acquired primary data (ab3A responses to ethyl acetate stimulus).

(a) Seven repetitions of fluctuating ethyl acetate stimulus (each gray trace is from a presentation to a different ab3A neuron in a different sensillum; mean shown in black). (b) Raw voltage recording from 7 different ab3 sensilla. (gray traces, one from each neuron; mean shown in black). (c) One of the traces in (b) is filtered to visualize spikes. Note that spikes from the ab3A neuron are typically larger than spikes from the ab3B neuron, enabling us to sort them and measure the response of a single neuron *in vivo*. (d) Raster of ab3A spikes for 7 different ORNs. Arrow indicates trace shown in (c).