

## **Supporting Information for**

### **Gas-phase biosensors (bio-sniffers) toward measurement of the causative volatile molecule of human aging odor 2-nonenal**

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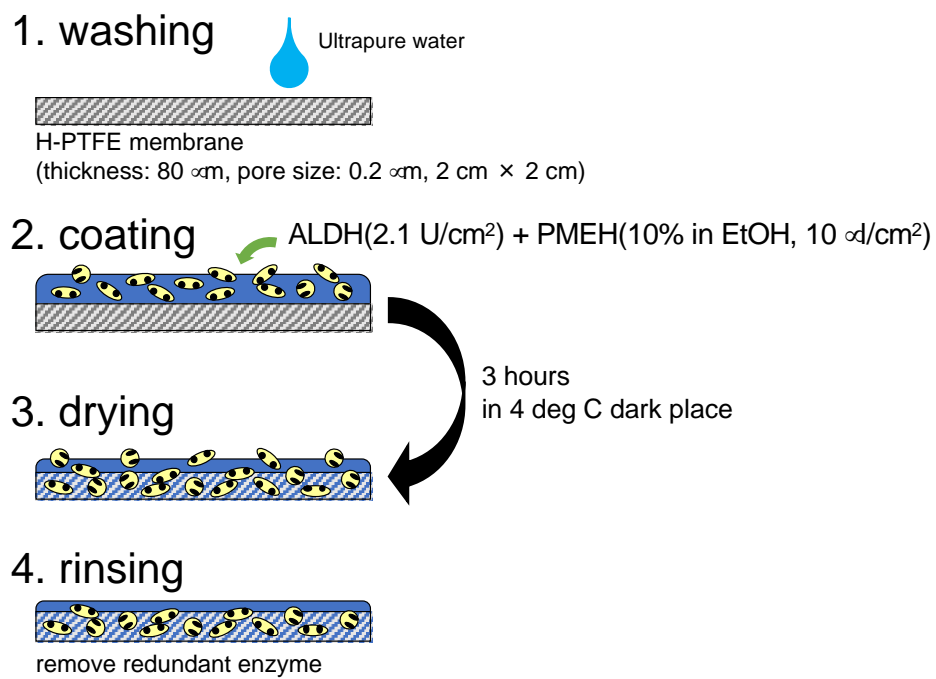
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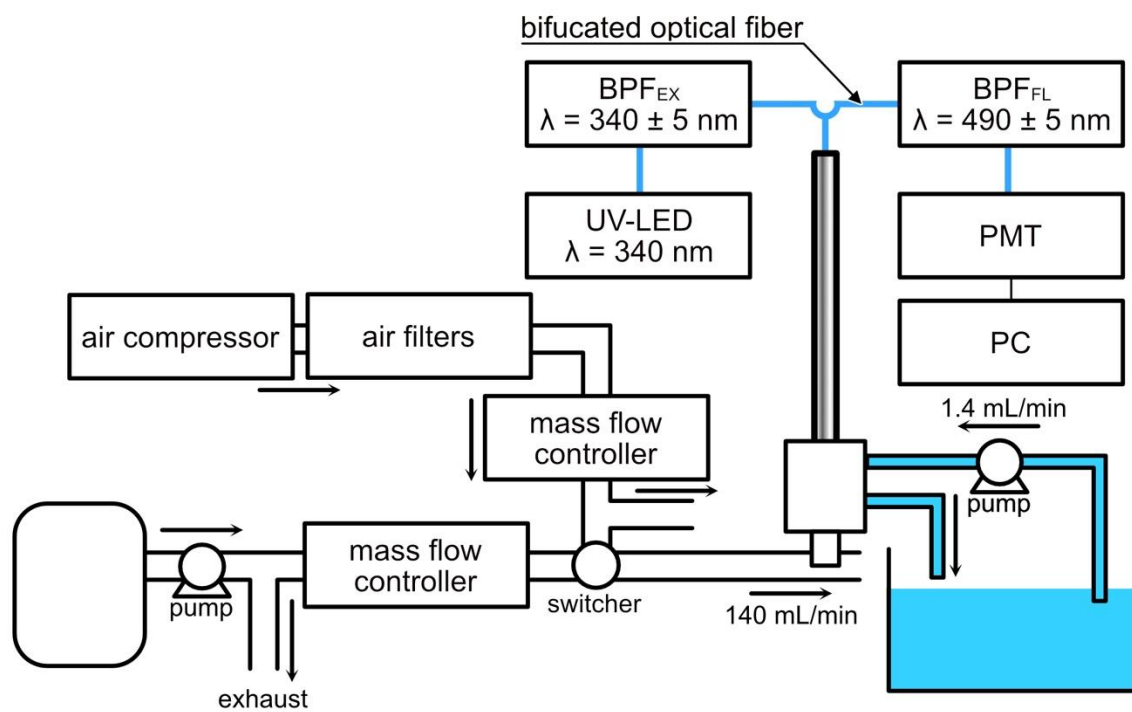
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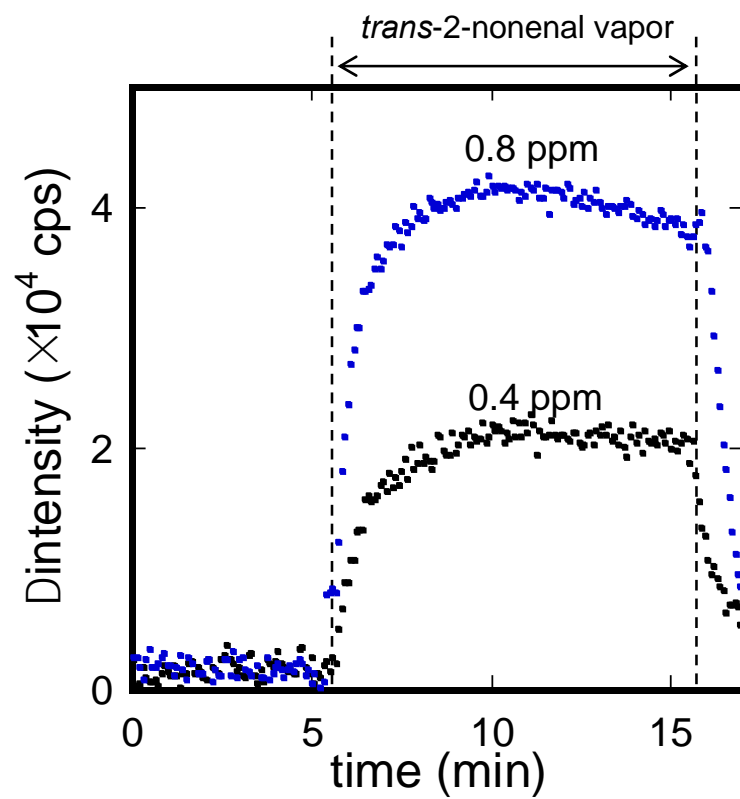
Figures S1, Figure S2, Figure S3



**Figure S1.** A preparation method of an ALDH-immobilized membrane



**Figure S2.** Experimental setup for measurement of *trans*-2-nonenal vapor



**Figure S3.** Time course of fluorescence intensity by applying *trans*-2-nonenal vapor against ER1 bio-sniffer.