Supporting information

## Air-bubble insensitive microfluidic lactate biosensor for

## continuous monitoring of lactate in sweat

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**Figure S1.** Measurement methods. A syringe pump was used to supply the solution to the microchannels through artificial sweat glands.



**Figure S2.** Relationship between lactate-sensor response time and reservoir thickness. The response time is defined as the time required for the reservoir to fill the solution and stabilize the sensor response.



Figure S3. Responses of lactate sensor with microfluidics in 0.1 M phosphate buffer (pH 4.5) containing 20 mM lactate at 10  $\mu$ L/min flow rate.