

## Supporting Information

### **Monitoring of pH Change in Live Rat Brain with MoS<sub>2</sub>/PAN Functionalized Microneedle**

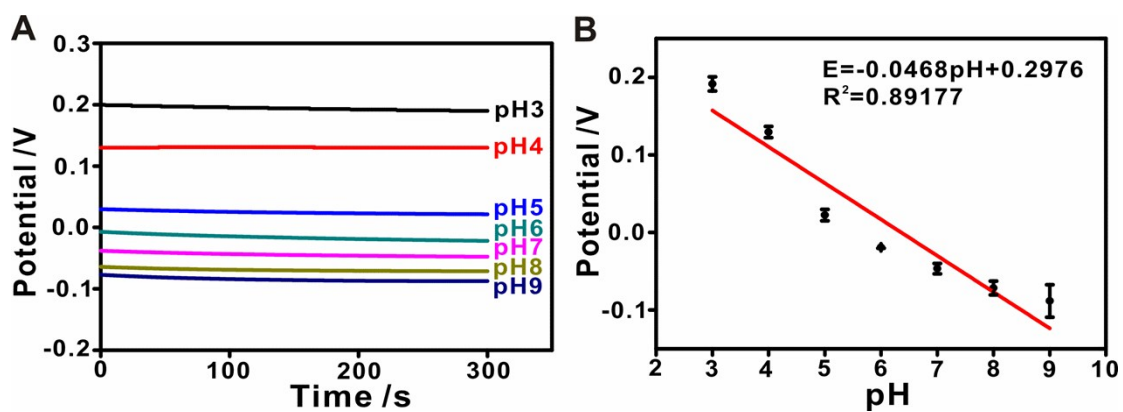
Jin-Xiu Zhou<sup>[+]</sup>, Fan Ding<sup>[+]</sup>, Li-Na Tang, Teng Li, Yun-Hui Li, Yu-Jie Zhang, Hao-  
Yue Gong, Yu-Tao Li\*, Guo-Jun Zhang\*

School of Laboratory Medicine, Hubei University of Chinese Medicine, 1 Huangjia  
Lake West Road, Wuhan 430065, PR China.

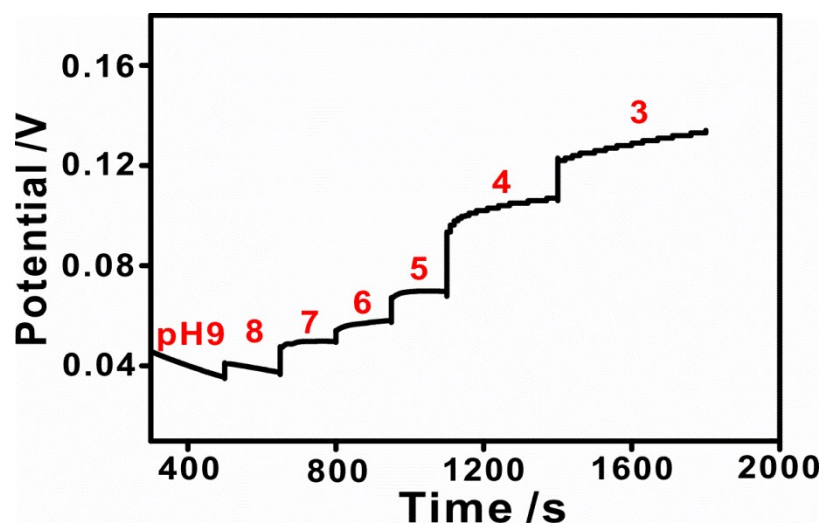
[+]These authors contributed equally to this work

\*Corresponding author: Tel: +86-27-68890259, Fax: +86-27-68890259

Email: zhanggj@hbtcu.edu.cn



**Figure S1.** (A) Open-circuit potential response of various pH in serum on PAN/MoS<sub>2</sub>/AN. (B) The calibration curve of PAN/MoS<sub>2</sub>/AN to a series of pH value. (slope: 46.8 mV/pH)



**Figure S2.** Real-time potential responses of PAN/MoS<sub>2</sub>/AN for a series of pH in serum.