

Supplementary information

Label-free Electrochemical Immunosensor based on Decorated Cellulose Nanofibrous Membrane for Point-of-Care Diagnosis of Amanitin Poisoning *via* Human Urine

Ahmed Y. El-Moghazy ^{1,2*}, Noha Amaly ^{1,2}, Nitin Nitin ^{1,3}, Gang Sun ¹

¹ *Department of Biological and Agricultural Engineering, University of California, Davis, CA 95616, USA.*

² *Polymeric Materials Research Department, Advanced Technology and New Materials Research Institute, City of Scientific Research and Technological Applications (SRTA-City), New Borg El-Arab City 21934, Alexandria, Egypt.*

³ *Food Science and Technology, University of California, Davis, United States.*

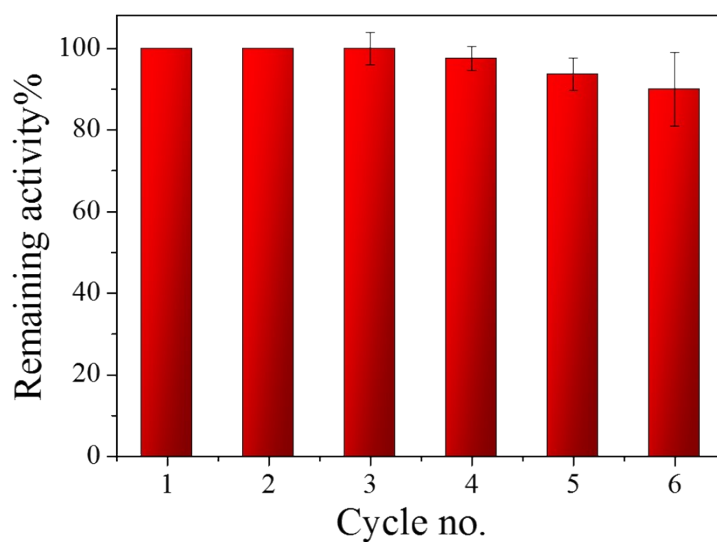


Fig. S1. Reusability of the fabricated immunosensor after the regeneration by dipping the immunosensor into 0.1 M glycine hydrochloric acid buffer (pH 2.8) for 5 min after AMN detection at concentration of 0.1 ng mL⁻¹.

Table S1: Cross-reactivity of the developed immunosensor for different compounds at 0.1 ng mL⁻¹.

Compound	C.R%
AMN	100
Psilocybin	0
Muscimol	0
Ibotenic	0
Microcystin-IR	0
Nodularin	0

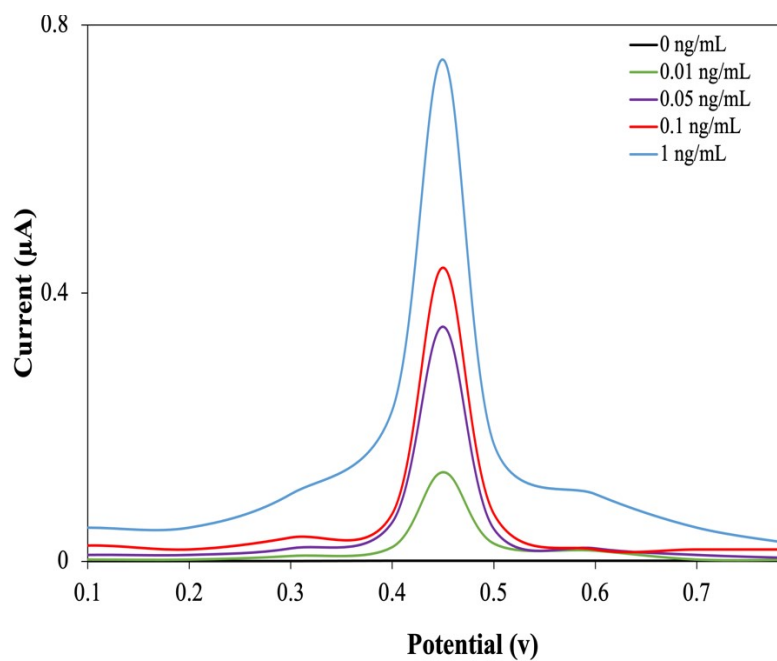


Fig. S2. Electrocatalytic current responses of the fabricated electrochemical immunosensor for the human urine samples spiked with different concentrations of AMN in the range of 0.01 ng mL⁻¹ to 1 ng mL⁻¹