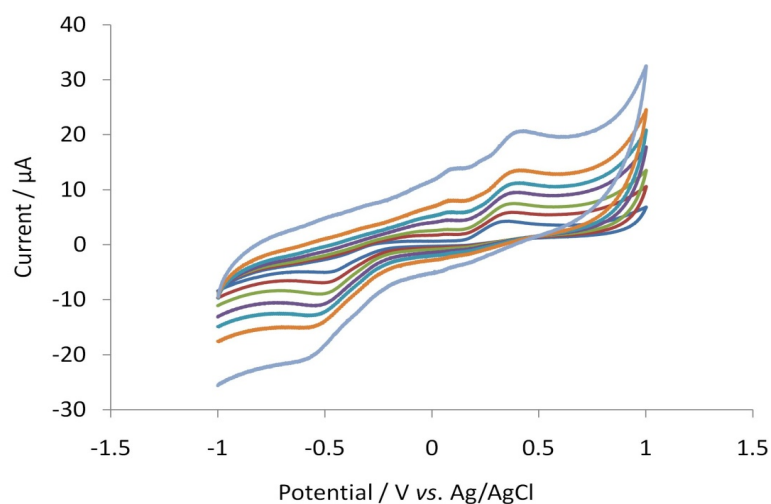


## Supplementary material

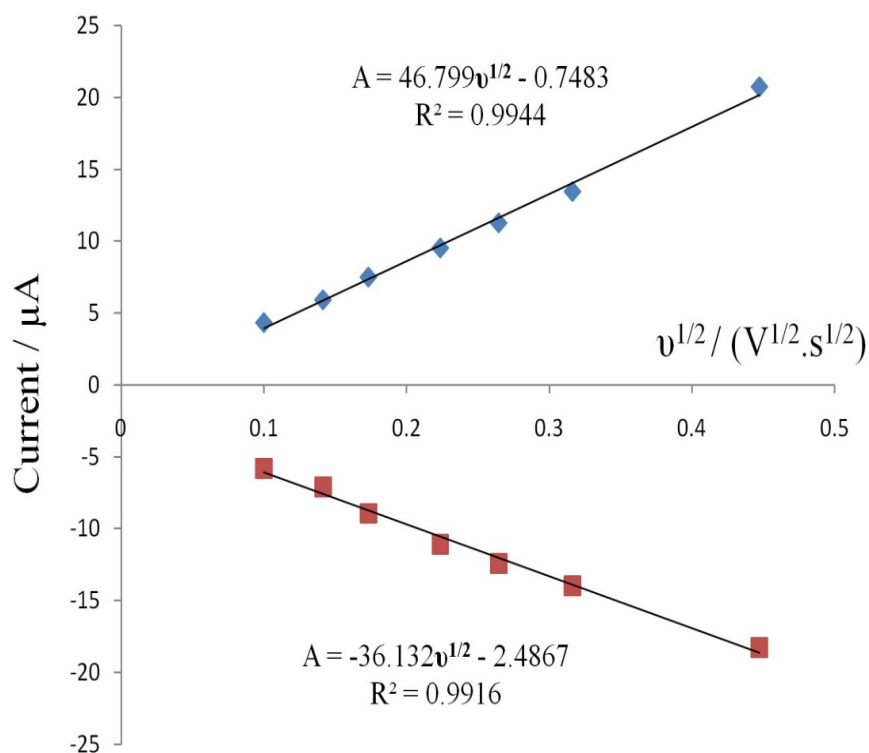
### A novel biosensor based on horseradish peroxidase trapped in silica Sol-Gel/MWCNTs matrix for methyldopa determination in medical and pharmaceutical samples

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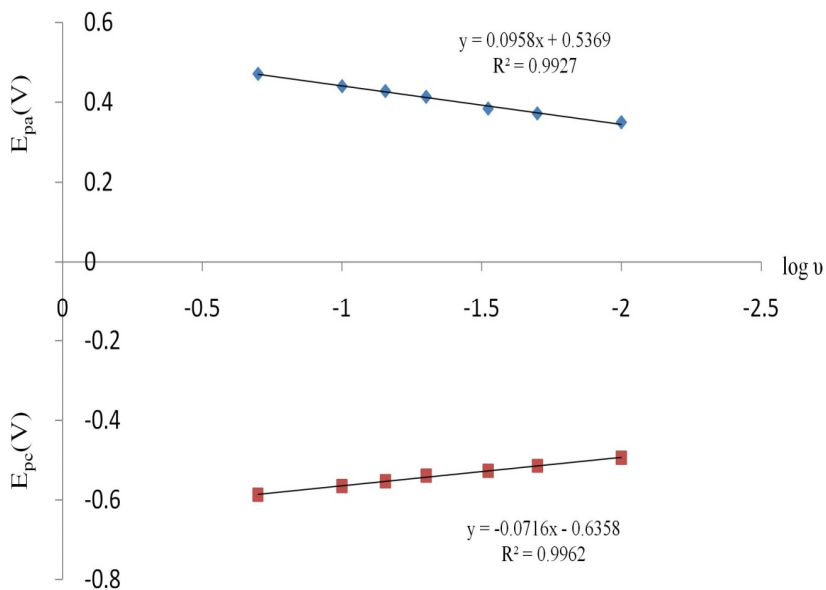
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**Figure S1.** The effect of potential scan rate ( $v$ ) on CV voltammograms of  $3 \text{ mmol L}^{-1}$  methyldopa and  $0.15 \text{ mmol L}^{-1}$  of  $\text{H}_2\text{O}_2$  in phosphate buffer within scan rate of 10 to  $200 \text{ mV s}^{-1}$ . Pulse amplitude  $50 \text{ mV}$ , pulse width  $50 \text{ ms}$ , scan rate  $100 \text{ mVs}^{-1}$ .



**Figure S2.** Linear relation between potential scan rate and anodic and cathodic peak currents. Regression equations and correlation coefficients are shown for both linear slopes.



**Figure S3.** Potential peak currents ( $E_{pa}$  and  $E_{pc}$ ) vs. logarithm of scan rate for CV voltammograms of Figure 1.