

## **An electrochemiluminescent-supramolecular approach to sarcosine detection for early diagnosis of prostate cancer.**

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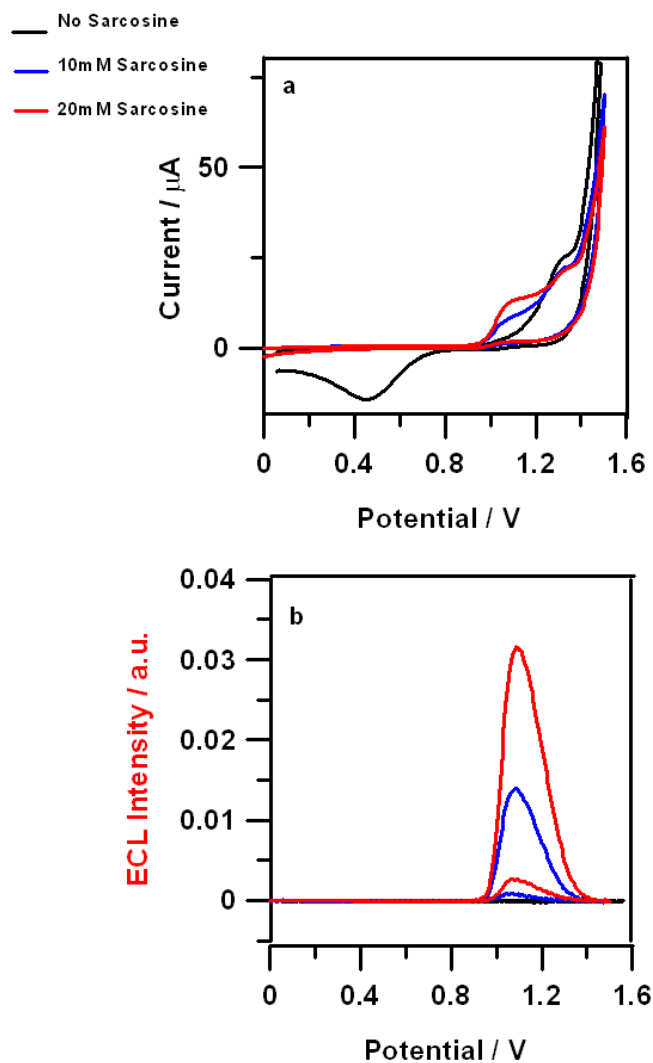
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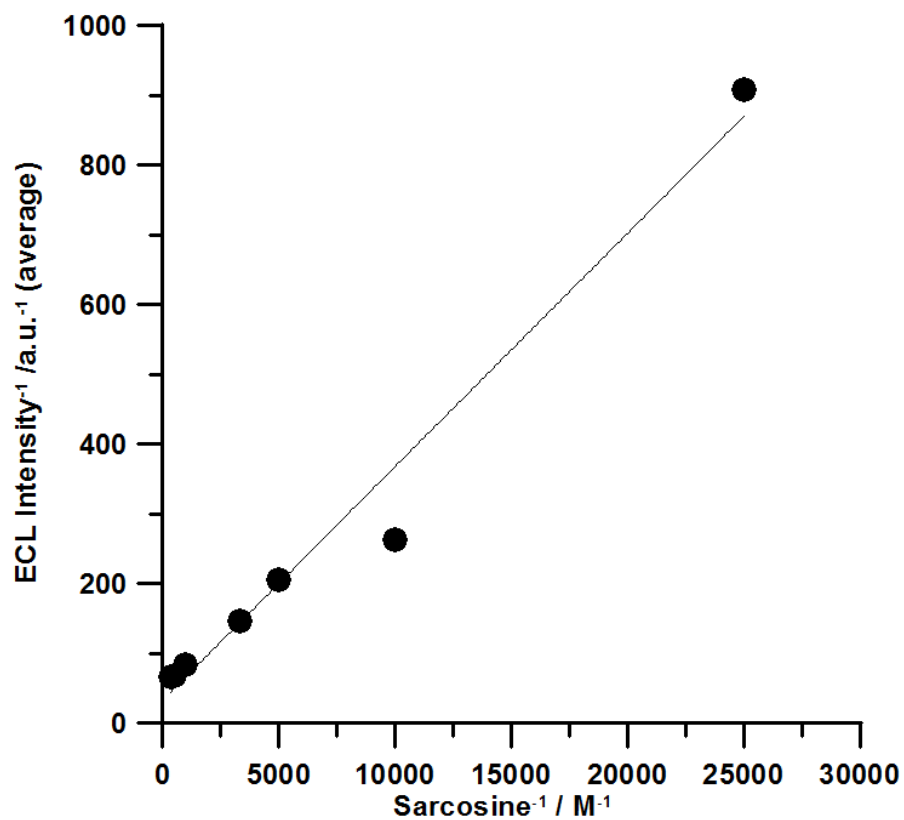
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## **Electronic Supplementary Information (ESI)**



**Figure S1** Cyclic Voltammetry (a) and ECL of Ru(bpy)<sub>3</sub><sup>2+</sup> 1 mM solution in phosphate buffer without (black line) and with 10 mM (blue line) and 20mM (red line) of sarcosine.



**Figure S2** Linearization of the ECL intensity vs sarcosine concentration (50, 100, 200, 300, 400, 1000, 2000, 3000  $\mu\text{M}$ ), obtain from PB (pH 9) solution, 20  $\mu\text{M}$   $\text{Ru}(\text{bpy})_3^{2+}$  the potentials applied versus Ag/AgCl is 1.45 V. MMBs are previously functionalize with the **Tiiii**, after the **Tiiii@MMB** were incubate with the sarcosine at pH 5 for 1 h. The **Tiiii@MMB** -Sarcosine hydrochloride complex were washed three times with 0.05% Tween 20 and PB pH 5. Inset, the linear part in the calibration curve. Error bars show standard deviations (n=3).