

Electronic Supplementary Information

For

A cost-effective and rapid quantitative testing of polymyxin B sulphate with simple and portable pressure meter readout

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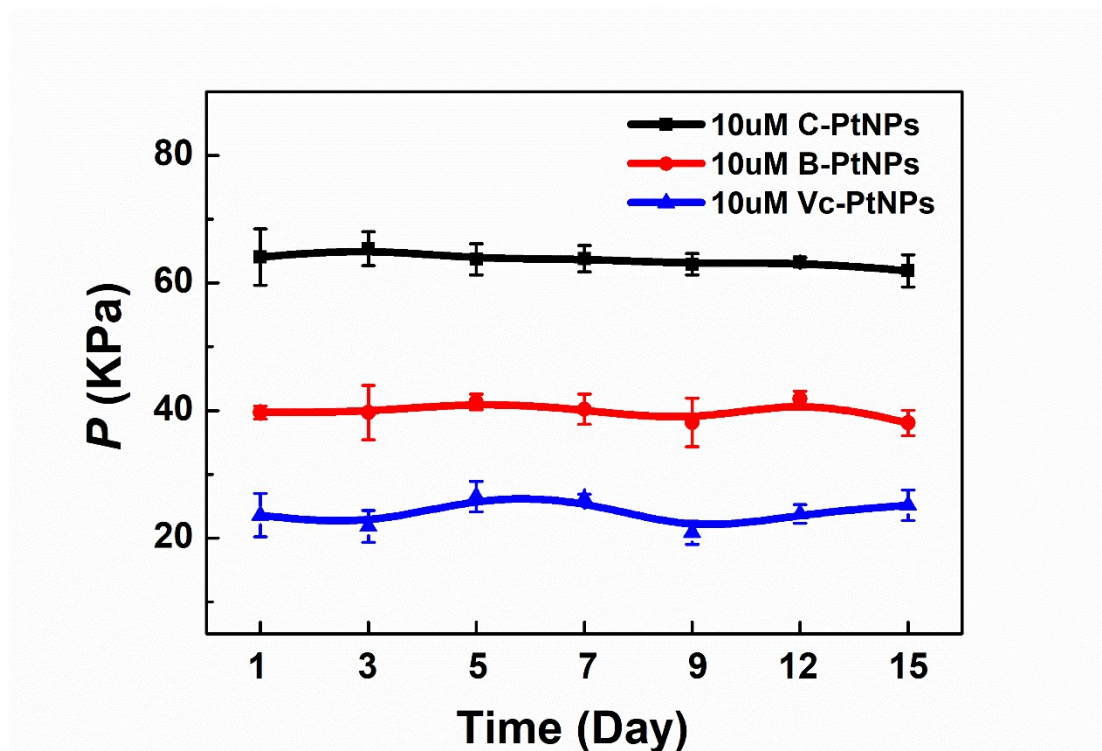


Fig.S1 The stability of the catalytic activity of the PtNPs under different synthetic protocols. Concentration: PtNPs, 10.0 μM ; 200 μL of 30% (w/v) H_2O_2 .

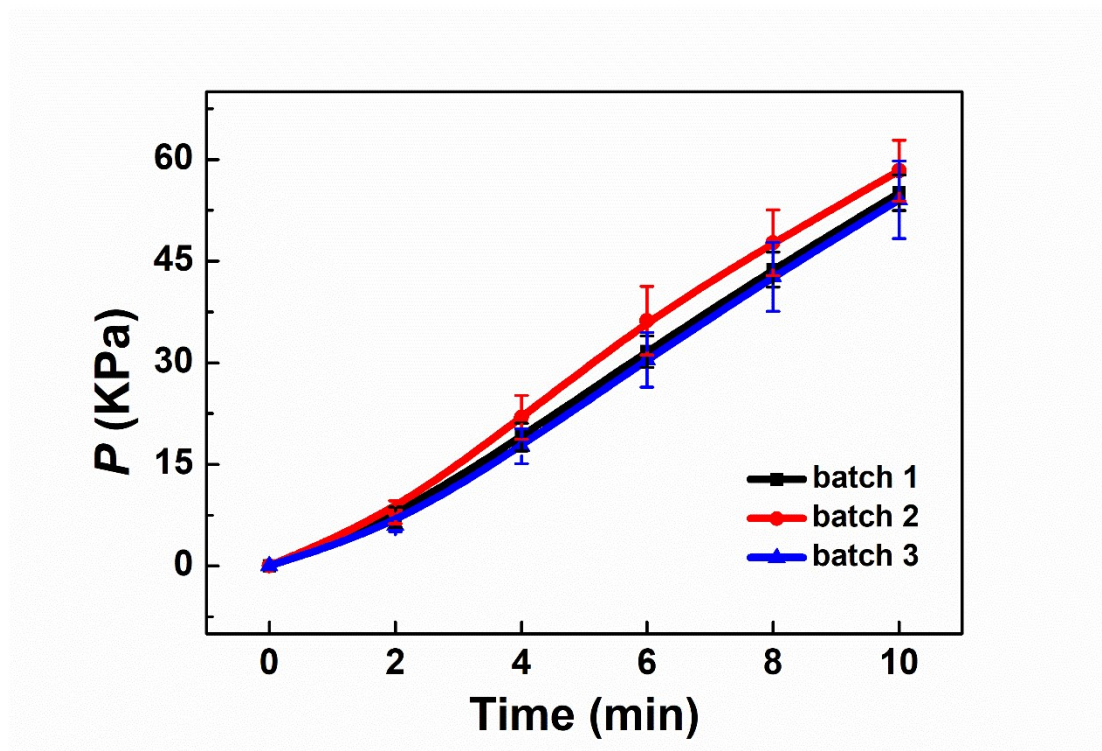


Fig.S2 The catalytic activity determination of the C-PtNPs between different batches.

Concentration: C-PtNPs, 10.0 μM ; 200 μL of 30% (w/v) H_2O_2 .

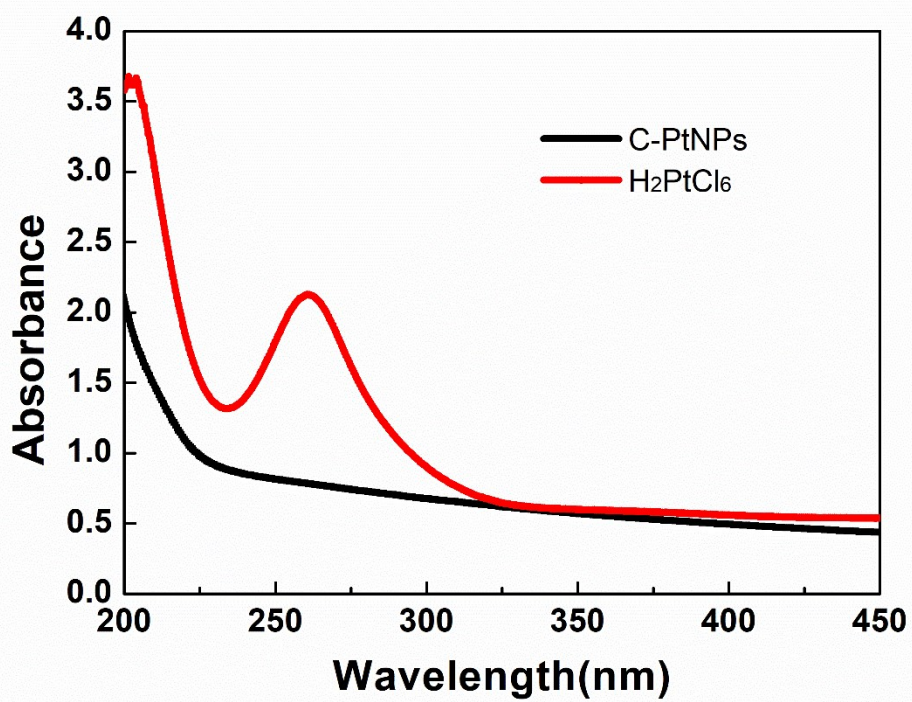


Fig.S3 UV-vis absorption spectra of the H₂PtCl₆ and the as-prepared C-PtNPs.

Table. S1 Comparison of the analytical parameters of the different methods for PMB determination.

Method	Linear range	LOD	Reference
Capillary electrophoresis	24–608 µg/mL	14.7µg/mL	Srisoma et al. (2007)
Spectrofluorimetric	100-1200 ng/mL	10.31 ng/mL	Kosasy et al. (2015)
Liquid chromatography with tandem mass spectrometry	50-300 ng/mL	15 ng/g	Zhang et al. (2015)
Resonance rayleigh scattering spectroscopy	0.02-6.0 µg/mL	6.36 ng/mL	Shen et al. (2013)
Thin-layer chromatography	25-100 ng/mL	25 ng/mL	Sharaf et al. (2002)
Pressure signal detection	0.05-1.0 µM	26.8 nM	this work

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