

## **Natural dye-mediated signal tracer strategy: a green route for ultra-efficient immunochromatographic detection of antibiotic**

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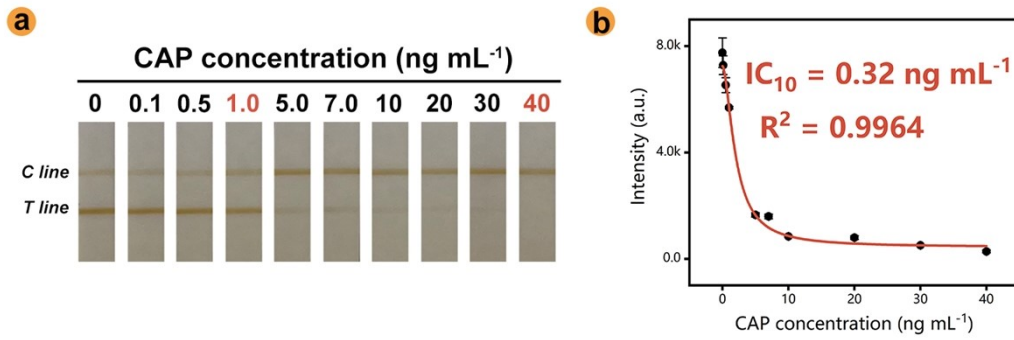
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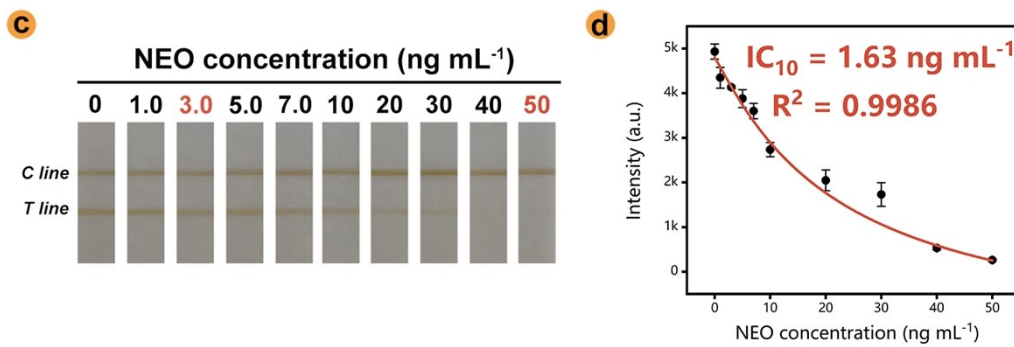
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[yanruwang22@163.com](mailto:yanruwang22@163.com)

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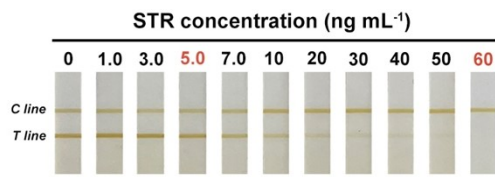
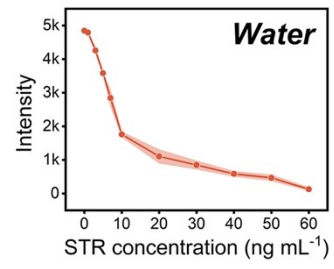
## NAST-ICA for CAP analysis



## NAST-ICA for NEO analysis



**Fig. S1** The applicability analysis of NAST-ICA. (a) Strip results and (b) corresponding nonlinear fitting curve of CAP analysis. (c) Strip results and (d) corresponding nonlinear fitting curve of NEO analysis.

**a****b**

**Fig. S2** Recoveries results of NAST-ICA in actual water body. (a) Strip and (b) intensity results of water sample.

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**Table S1.** Recovery validation experiments for the detection of STR spiked in water (n = 3).

Sample	Added (ng mL <sup>-1</sup> )	Mean found (ng mL <sup>-1</sup> ) ± SD	Recovery (%)	RSD (%)
Water	1	1.18 ± 0.02	118.18	1.99
	5	4.43 ± 0.09	88.55	2.07
	10	9.31 ± 0.23	93.08	2.44

**Table S2.** The cost of one strip from the material preparation to the detection finished.

	Unit price	Dosage	Total (USD)
Alizarin	0.14 USD/g	0.0021 g	0.000294
Water	0.0006 USD/mL	0.00225 mL	0.00000135
Ethanol	0.0028 USD/mL	0.00075 mL	0.0000021
Anti-STR-mAbs	139.7 USD/mg	0.00018 mg	0.025146
Ab <sub>2</sub> for probe	5.5875 USD/mg	0.00036 mg	0.0020115
Ab <sub>2</sub> for C line	5.5875 USD/mg	0.00003 mg	0.00016763
STR-BSA	139.7 USD/mg	0.0000075 mg	0.00104775
Sample pad	0.0016 USD/mm	3 mm	0.0048
Absorbent pad	0.0007 USD/mm	3 mm	0.0021
NC membrane	0.0003911 USD/mm	3 mm	0.0011733
PVC plant	0.0007 USD/mm	3 mm	0.0021
Total			0.03884363