

## Supporting Information

### Sensitive analysis of reduced glutathione in bacteria and HaCaT cells by capillary electrophoresis via online pre-concentration of transient trapping combined with the dynamic pH junction mode

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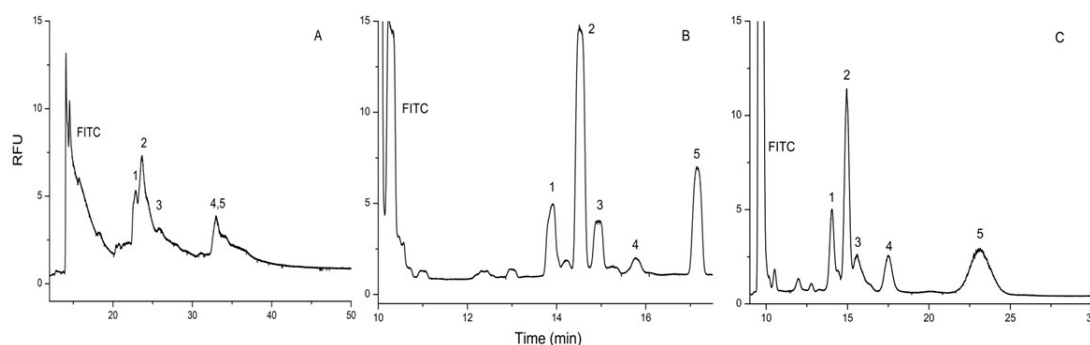
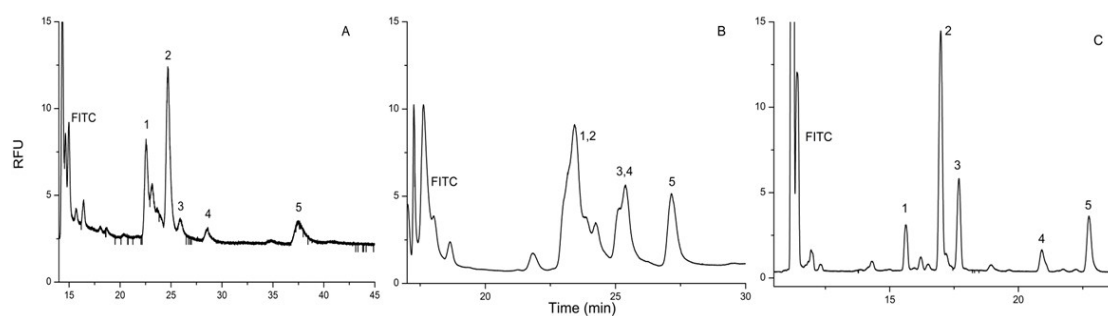
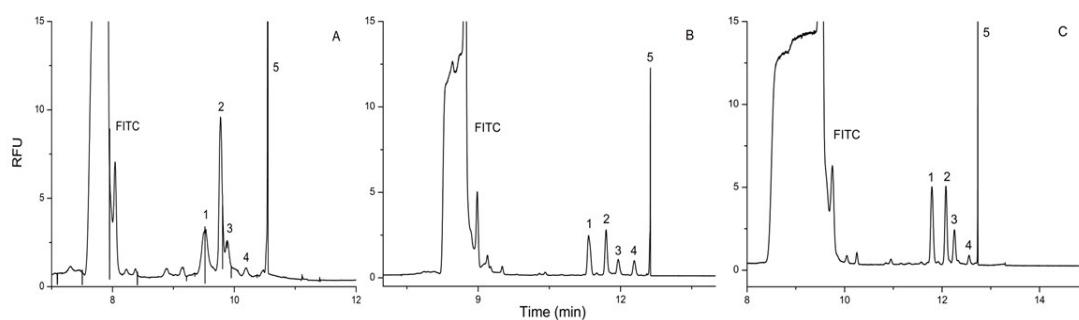


Fig. S1. Effects of different types of the background electrolyte (BGE): (A) Tris, (B) sodium phosphate, (C) borax. Experimental conditions: Concentration of each BGE: 25 mmol L<sup>-1</sup>; Peak identifications: 1.GSH, 2. Gly, 3. GSSG, 4.Cys, 5.Glu; column: 60 cm × 75 μm; Separation voltage: + 20 kV; Concentration of the analyte: 1×10<sup>-6</sup> mol L<sup>-1</sup>; Sample diluted in BGE with an injection time of 8 s at 20 kV.



**Fig. S2.** Effects of different types of the addition of an organic solvent in the BGE: (A) ethanol, (B) isopropanol, (C) acetonitrile. Experimental conditions: the BGE consisted of 25 mmol L<sup>-1</sup> of borax, 1 mg mL<sup>-1</sup> of Brij 35, and organic solvent (5% v/v); Peak identifications: 1.GSH, 2. Gly, 3. GSSG, 4.Cys, 5.Glu; The other conditions were the same as those described in Fig. S1.



**Fig. S3.** Effects of acidic electrolyte solutions as sample solution on the enrichment efficiency: (A) boric acid, (B) citric acid, and (C) phosphate. Experimental conditions: the BGE consisted of 25 mmol L<sup>-1</sup> of borax, 1 mg mL<sup>-1</sup> of Brij 35, and 5% v/v acetonitrile; The concentration of acidic electrolyte solutions: 40 mmol L<sup>-1</sup>; The SDS micellar phase was under electrokinetic injection during 25 s, the sample injection time was 90 s (at 20 kV); Peak identification: 1.GSH, 2. Gly, 3. GSSG, 4. Cys, 5. Glu; Capillary column: 60 cm × 75 μm; Separation voltage: + 20 kV; Concentration of the analyte:  $1 \times 10^{-8}$  mol L<sup>-1</sup>.