

### Supplementary data

#### **Acid-base reaction-based dispersive solid phase extraction of favipiravir using biotin from biological samples prior to capillary electrophoresis analysis**

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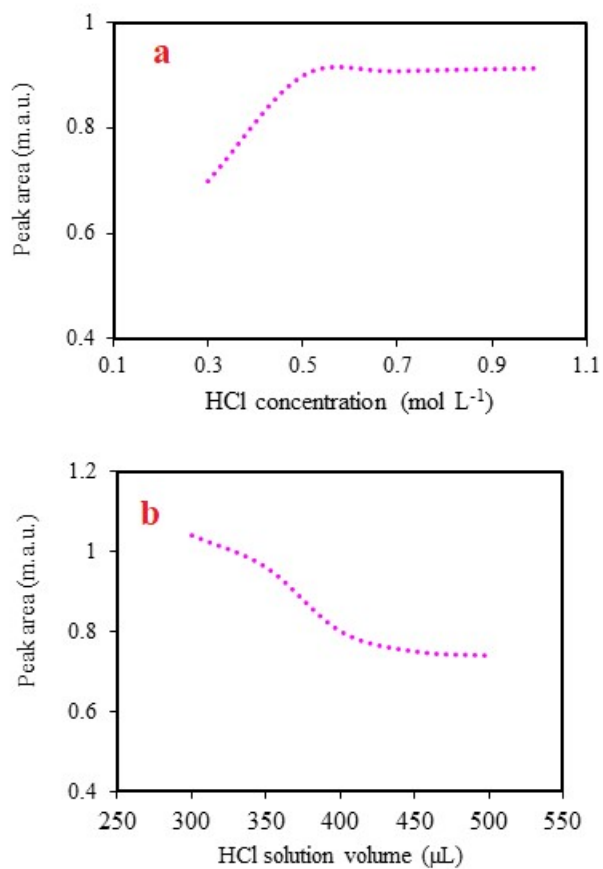


Fig. S1. The effect of HCl solution concentration (a) and volume (b) on extraction efficiency.

(a) Extraction conditions: sample, 5 mL deionized water spiked with favipiravir at 250 ng mL<sup>-1</sup>; adsorbent (amount), biotin (25 mg); acid solution volume, 300 μL; agitation type (time), vortex (1 min); elution solvent (volume), ACN (200 μL); desorption time, 2 min; and centrifugation rate (time), 4000 rpm, 5 min.

(b) Extraction conditions: are the same as those used in Fig. S1a, except the HCl solution concentration was 0.5 mol L<sup>-1</sup>.

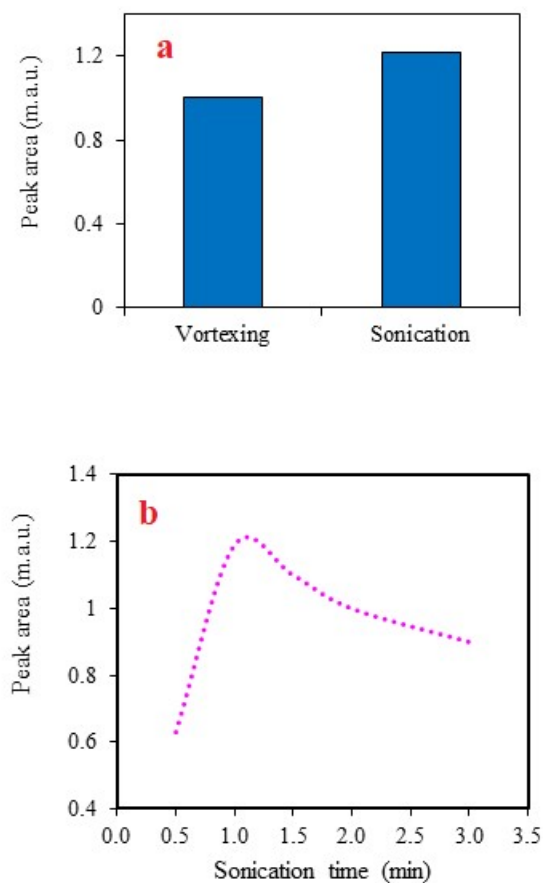


Fig. S2. The effect of agitation type (a) and time (b) on extraction efficiency.

(a) Extraction conditions: are the same as those used in Fig. S1b, except 300  $\mu\text{L}$  of HCl solution (0.5 mol  $\text{L}^{-1}$ ) was used.

(b) Extraction conditions: are the same as those used in Fig. S2a, except sonication was selected as the agitation type.

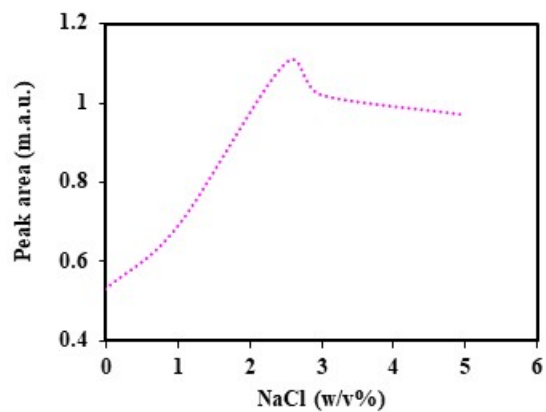


Fig. S3. The effect of salt addition on extraction efficiency.

Extraction conditions: are the same as those used in Fig. 4b, except 100  $\mu$ L of ACN and 1 min were chosen as the eluent and adsorption time, repetively.

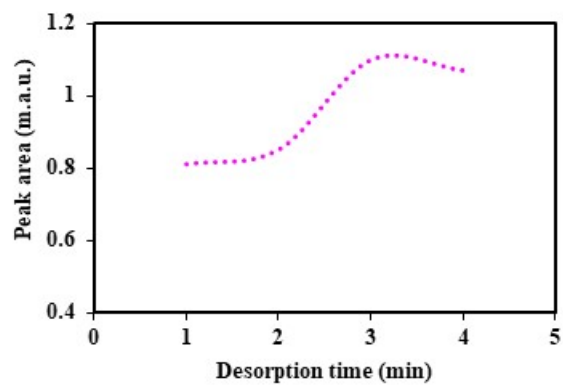


Fig. S4. The effect of desorption time on extraction efficiency.

Extraction conditions: are the same as those used in Fig. S3, except 2.5% (w/v) NaCl was dissolved in the solution.