

Fig. S1 Scheme of the sample preparation and CPE (cloud point extraction) procedures.

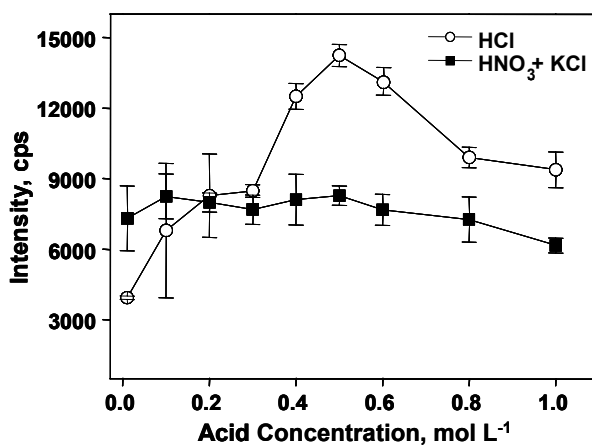


Fig. S2 Influence of the acid medium (HCl or HNO<sub>3</sub> + KCl) on the pre-concentration of Hg (3.0 μg L<sup>-1</sup> of Hg<sup>2+</sup>). DDTP concentration: 0.05% (m/v); Triton X-114: 0.3% (m/v) and KCl: 0.007% (m/v).

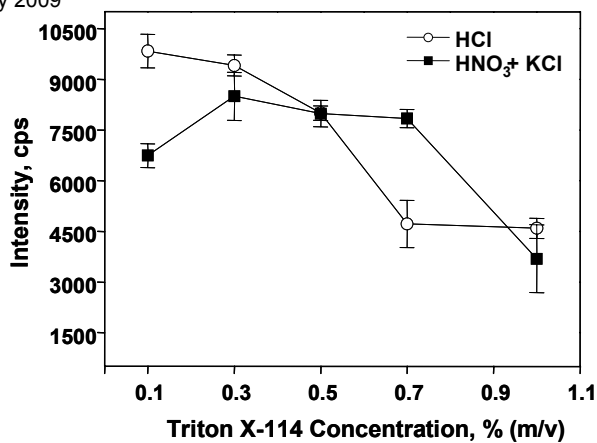


Fig. S3 Effect of the surfactant (Triton X-114) concentration on Hg ( $3.0 \mu\text{g L}^{-1}$  of  $\text{Hg}^{2+}$ ) pre-concentration. Pre-concentration medium:  $0.5 \text{ mol L}^{-1}$  HCl or  $0.5 \text{ mol L}^{-1}$   $\text{HNO}_3 + \text{KCl}$   $0.007\%$  (m/v), and DDTP  $0.05\%$  (m/v).

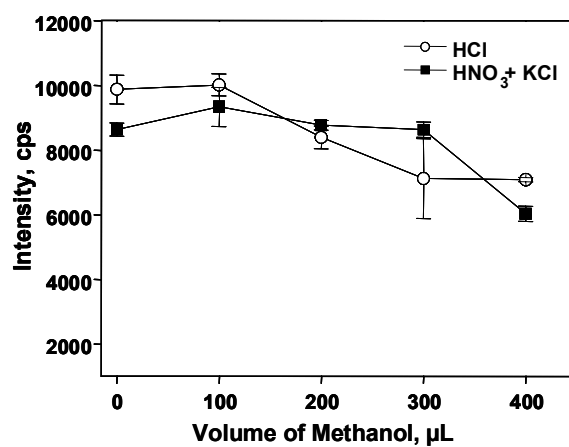


Fig. S4 Effect of the volume of methanol added the surfactant-rich phase. A solution containing  $3.0 \mu\text{g L}^{-1}$  of  $\text{Hg}^{2+}$  was used. Pre-concentration medium:  $0.5 \text{ mol L}^{-1}$  HCl or  $0.5 \text{ mol L}^{-1}$   $\text{HNO}_3 + \text{KCl}$   $0.007\%$  (m/v), DDTP  $0.05\%$  (m/v), and Triton X-114  $0.3\%$  (m/v). Different solutions with the same Hg concentration were prepared for each volume of methanol analyzed.