Supplementary Material

to

In-situ production of Histamine-imprinted polymeric materials for electrochemical monitoring of fish

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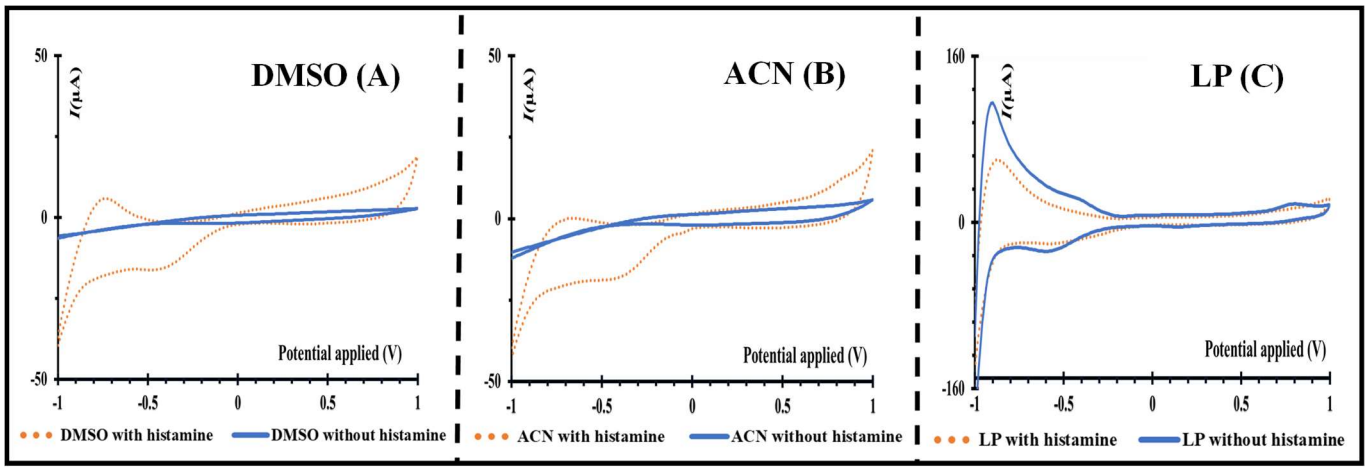

Figure S1. Results obtained using different chemical compounds for the determination of the best electrolyte for these assays. A: dimethyl sulfoxide 0.20 M; B: acetonitrile 0.2M; C: lithium perchlorate 0.20 M, all aqueous solutions.

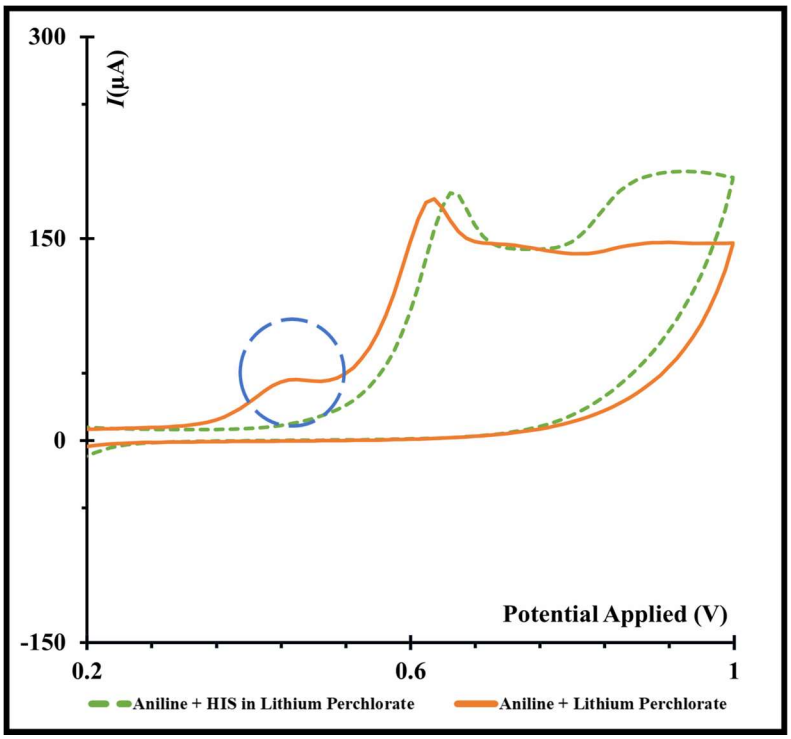

Figure S2. Cyclic voltammograms of a solution of Aniline (orange, regular line) prepared in lithium perchlorate and a solution of HIS (green, dotted line), also prepared in lithium perchlorate, evidencing the differential peak of aniline allowing further electropolymerization.

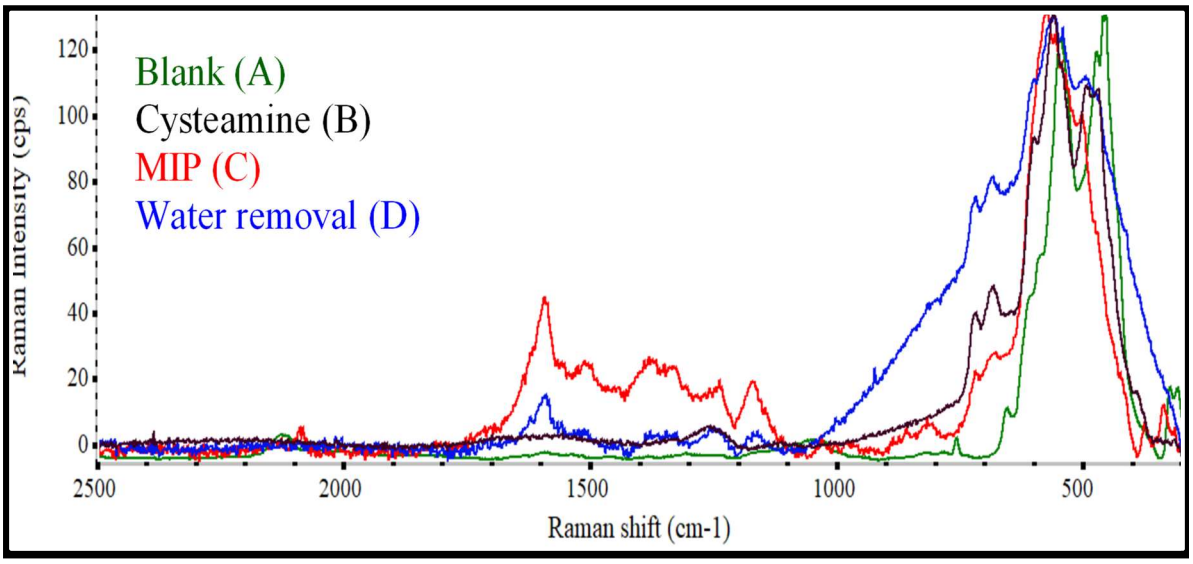

Figure S3. Raman spectra of the stages of the Au-SPE modification. (A) Blank, corresponding to Au-SPE without any treatment; (B) Au-SPEs with a Cysteamine modification, Au/Cys; (C) electropolymerization of MIP; (D) template removal with ultrapure water.

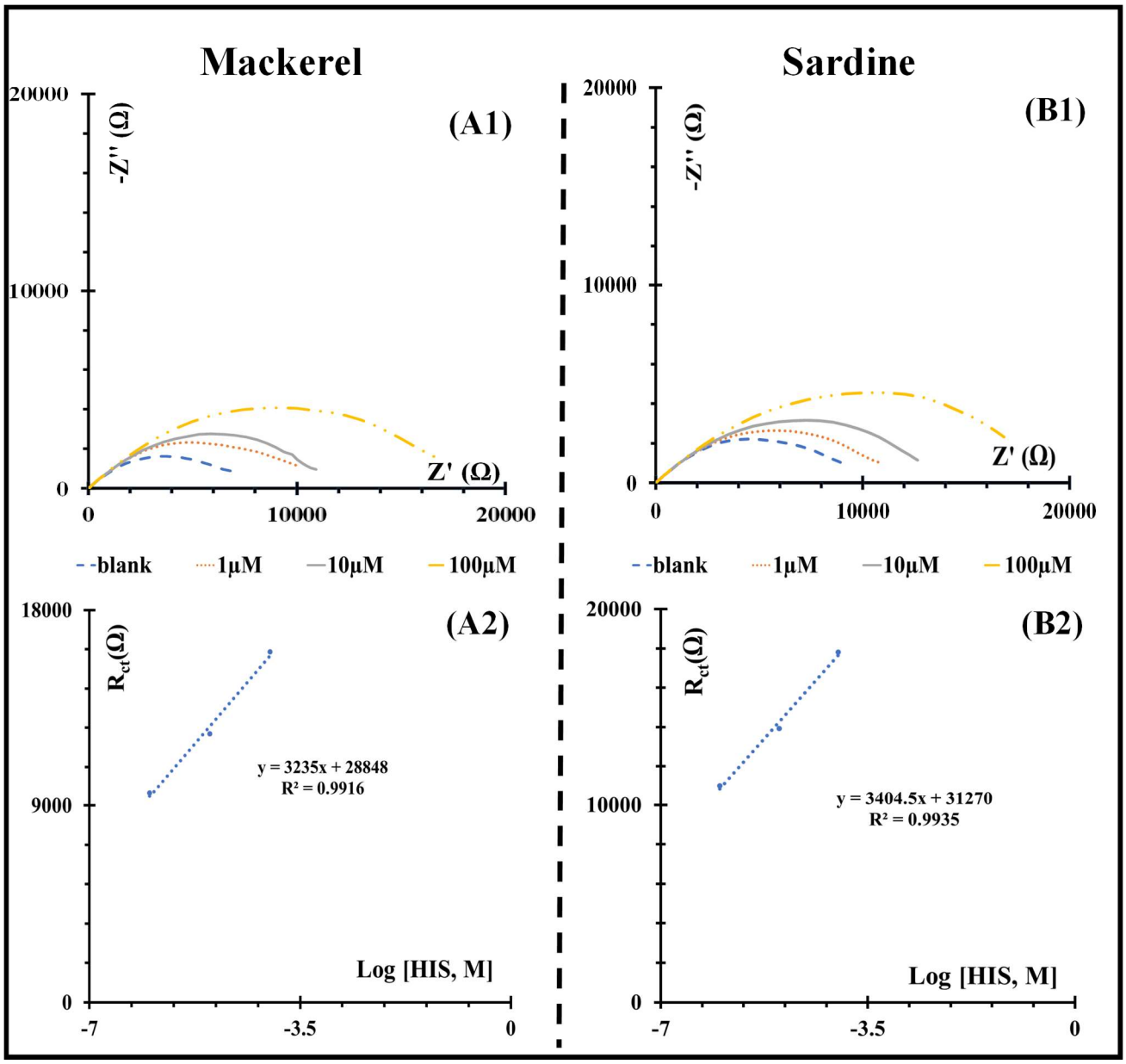

Figure S4. EIS (1, top) measurement in MIP sensor, and the corresponding calibration curves (2, bottom), in 5.0×10^{-3} M $[Fe(CN)_6]^{3-}$ and 5.0×10^{-3}M $[Fe(CN)_6]^{4-}$, in standard solutions of HIS of increasing concentrations, of Mackerel (A) and Sardine (B) samples, prepared in diluted blank fish water medium.