Electronic Supplementary Material (ESI) for Analyst.

Polarity Switching Mass Spectrometry Imaging of Healthy and Cancerous Hen Ovarian Tissue Sections by Infrared Matrix-Assisted Laser Desorption Electrospray Ionization (IR-MALDESI)

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Electronic Supplementary Information

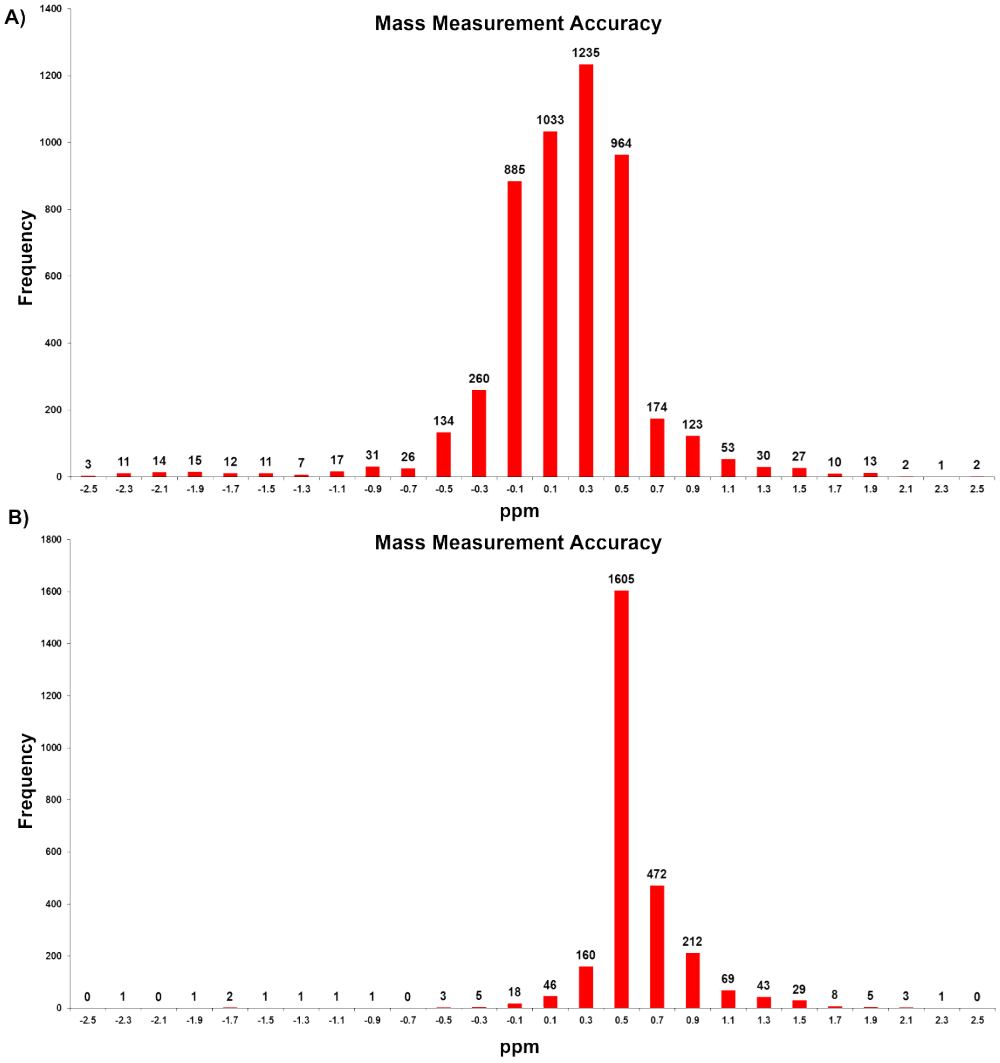

Figure S1. High mass measurement accuracy obtained in polarity switching IR-MALDESI MSI for cholesterol (*m/z* 369.3516 $[M\text{-}H_2O+H^+]^+$) in healthy **(A)** and cancerous **(B)** tissue sections.

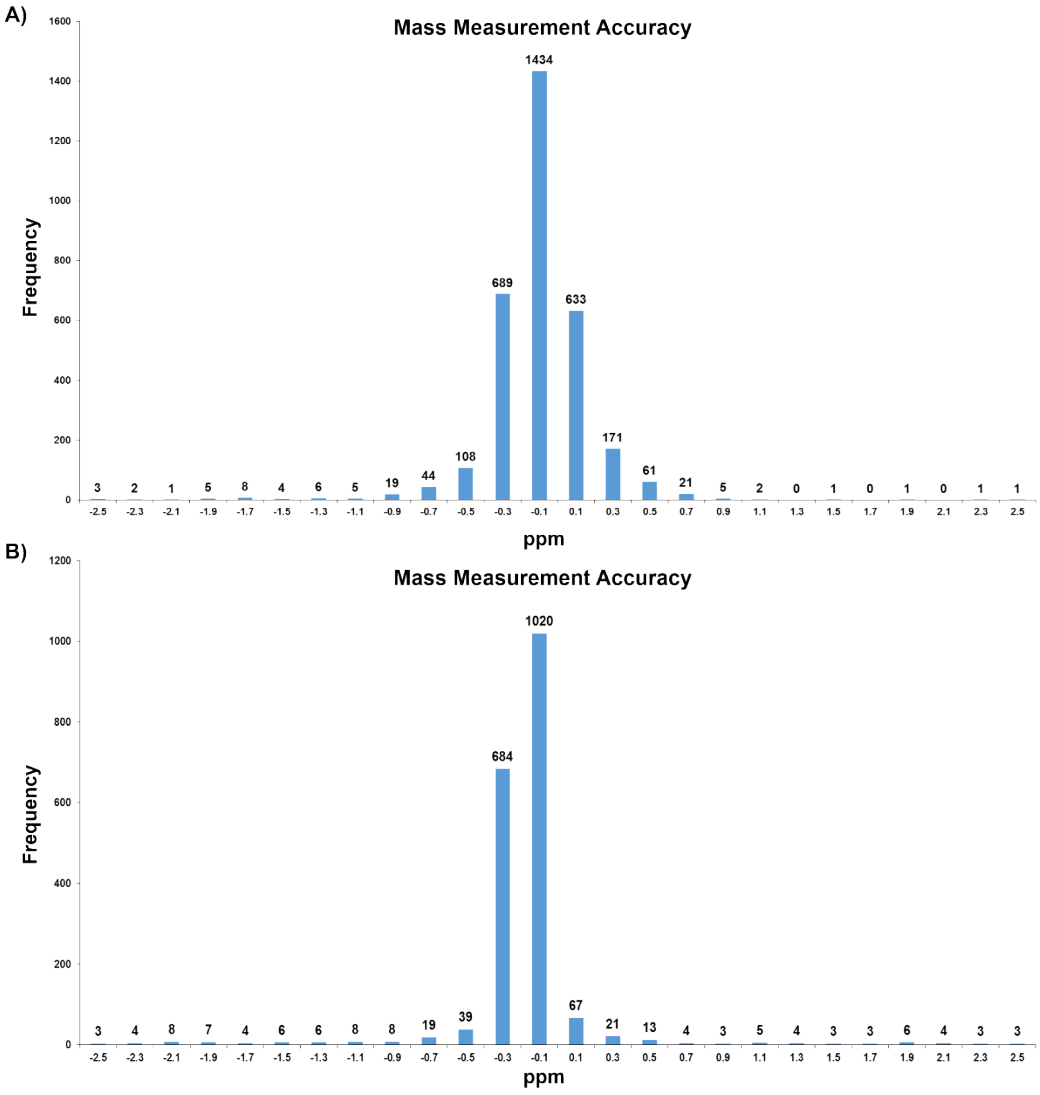

Figure S2. High mass measurement accuracy obtained in polarity switching IR-MALDESI MSI for glutathione (*m/z* 306.0766 $[M-H^+]^-$) in healthy **(A)** and cancerous **(B)** tissue sections.

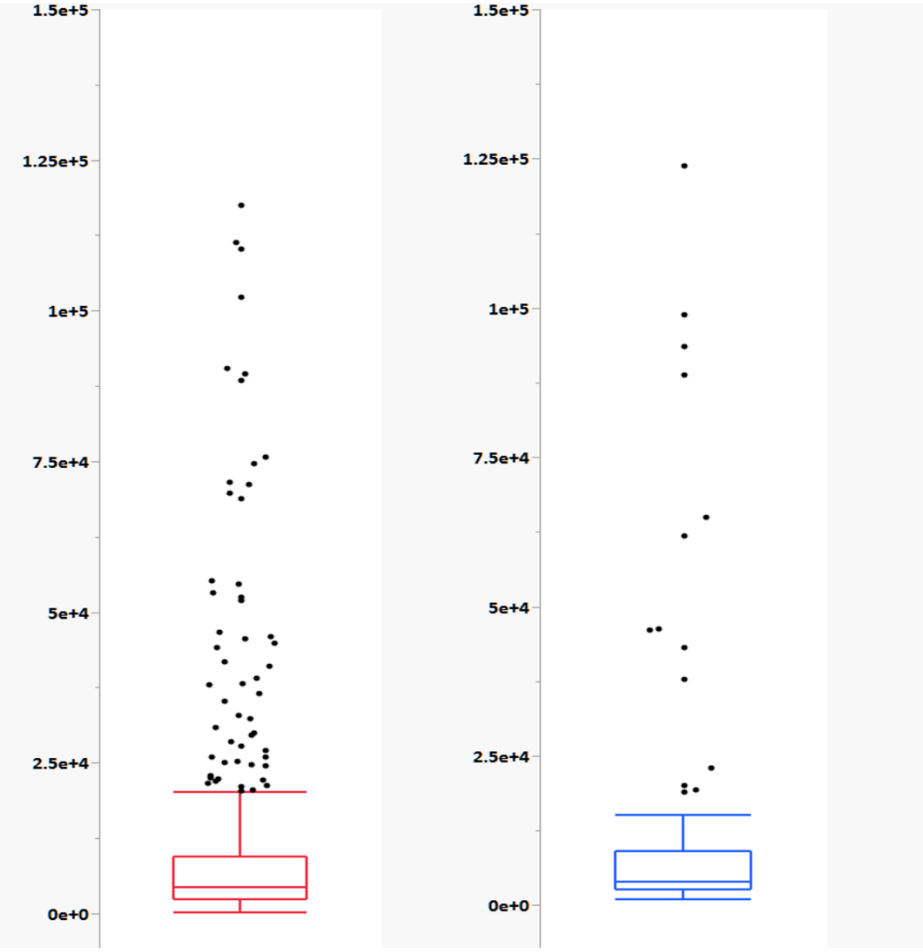

Figure S3. Box plots of tissue-specific ion abundances in mouse liver in positive- and negative-ion modes with acetic acid as the solvent modifier. The plots show that the optimized solvent (50:50 MeOH/H_2O, with 1 mM acetic acid) did not exhibit a systematic bias for one ionization mode over the other.