

Extraction, Antioxidant Capacity, 5-Lipoxygenase Inhibition, and Phytochemical Composition of Propolis from Eastern Canada

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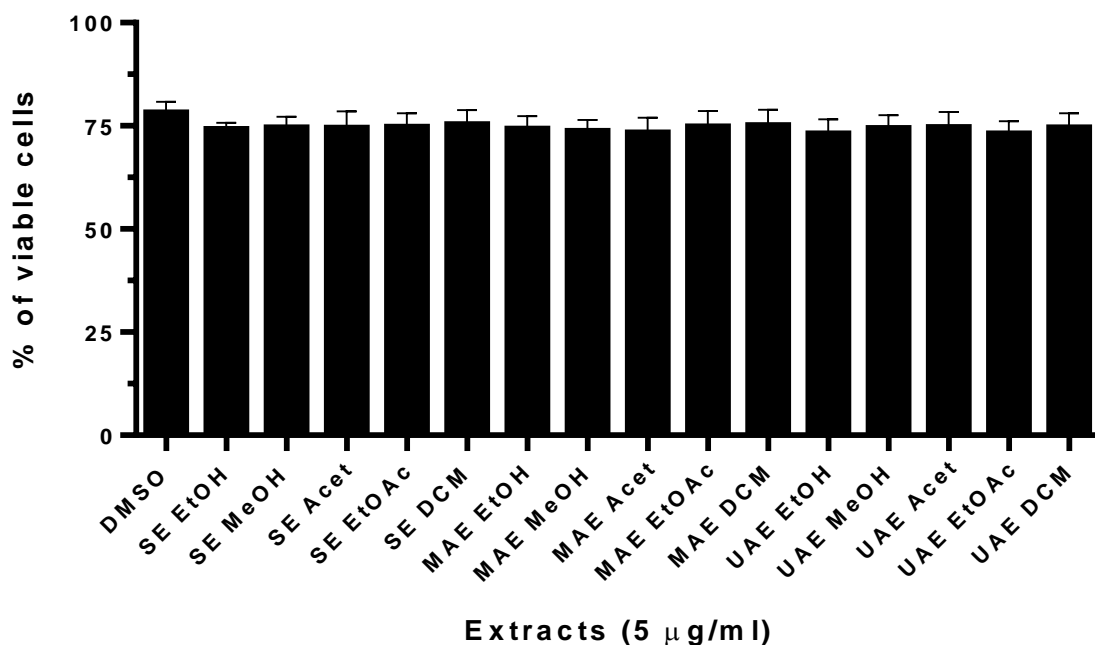


Figure S1: Cytotoxicity assay of tested extracts on HEK293 cells. HEK293 were detached with Accutase (Corning), resuspended at 5×10^5 cells/ml in PBS and then incubated in the presence of the indicated compounds at $5 \mu\text{g/ml}$ or vehicle (DMSO, 0.1%) for 20 minutes. Cell viability was immediately assessed by flow cytometry (Attune NxT, ThermoFisher) following staining with annexin V Alexa Fluor 647 and zombie aqua™ (Biolegend). No statistically differences, from DMSO control, were observed following one-way analysis of variance followed by Dunnett's multiple comparisons test.

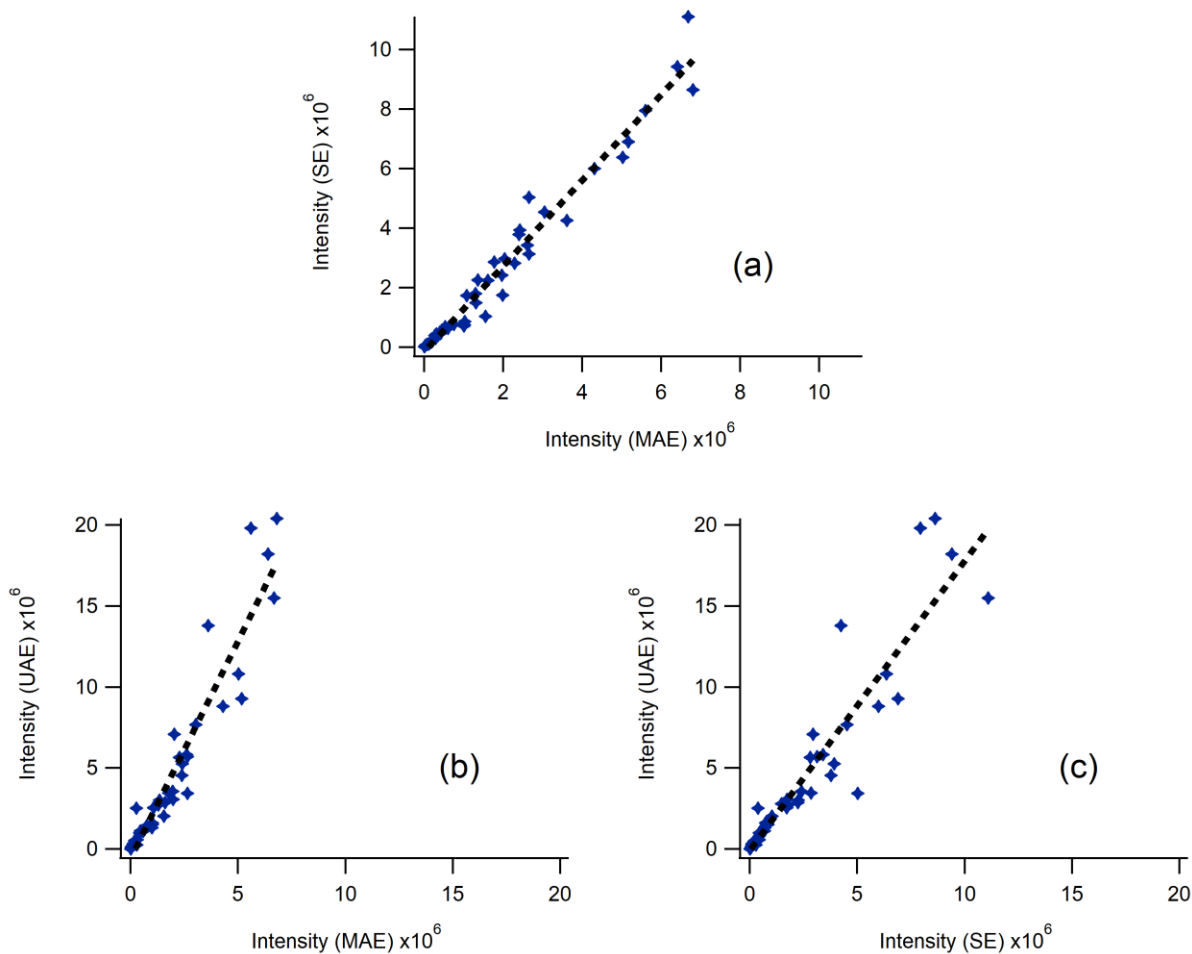


Figure S2. Comparison of LC-MS signals for 45 compounds using SE, UAE and MAE extraction techniques with methanol as the solvent. Note that the UAE data was recollected several days later than the SE and MAE data due to an unfortunate loss of the original data. The UAE numbers appear to be marginally higher than expected which could be due to a batch effect following routine maintenance of the mass spectrometer. The x- and y-axes have been set to the same value for a quick visual evaluation of the more sensitive method, i.e., negative or positive deviations of the slope from unity.

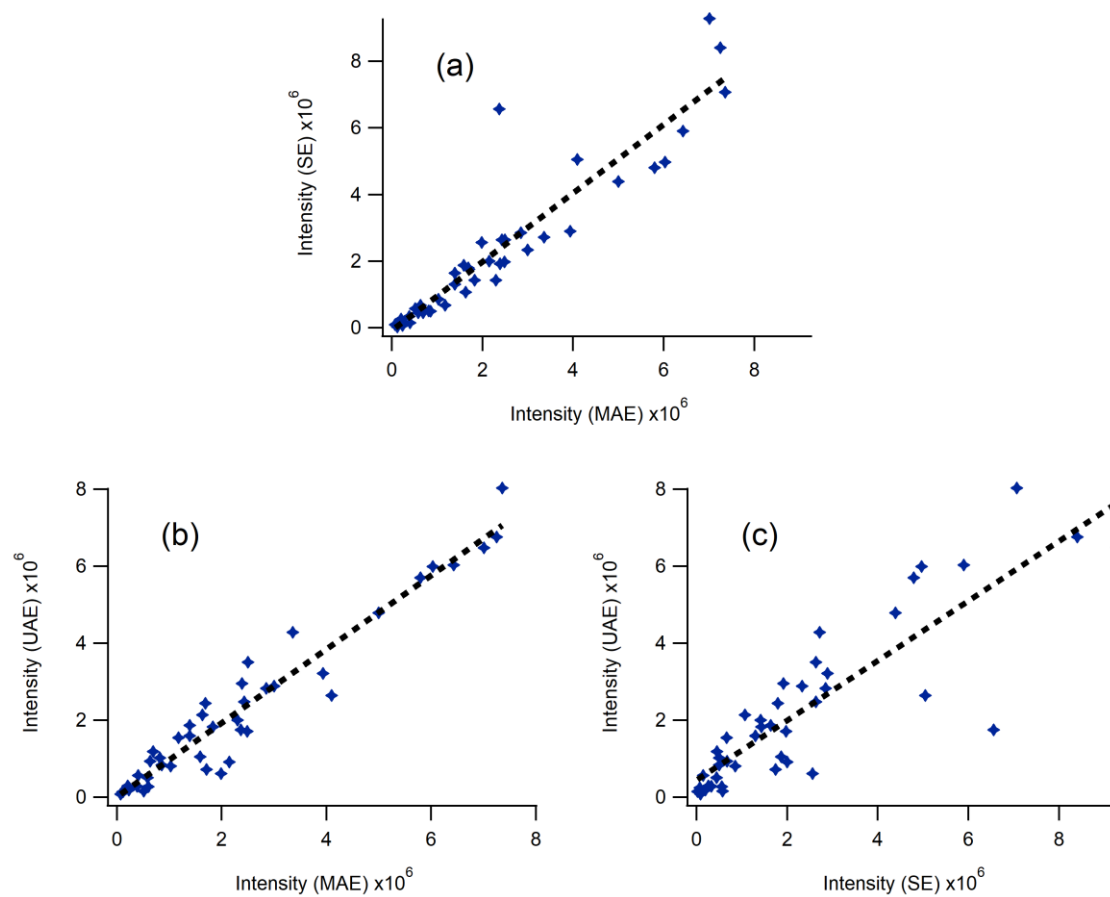


Figure S3. Comparison of LC-MS signals for 45 compounds using SE, UAE and MAE extraction techniques with ethanol as the solvent. The x- and y-axes have been set to the same value for a quick visual evaluation of the more sensitive method, i.e., negative or positive deviations of the slope from unity.

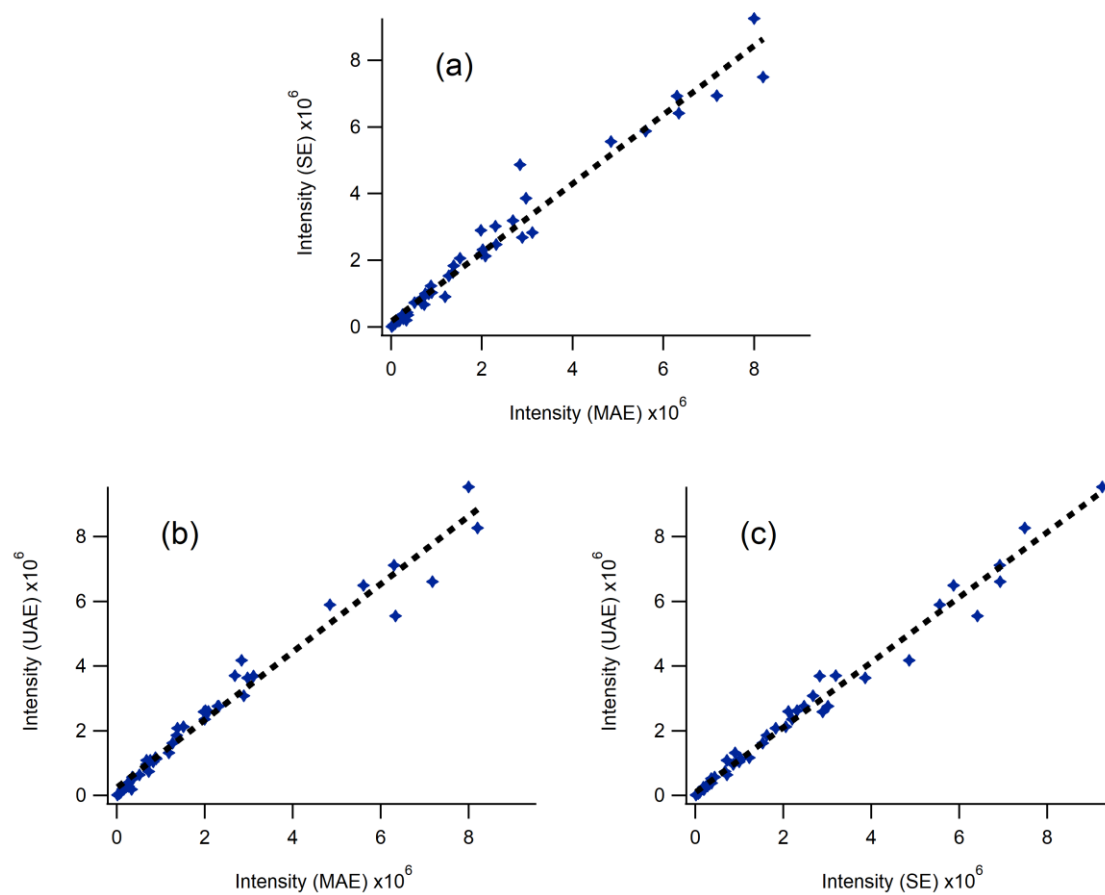


Figure S4. Comparison of LC-MS signals for 45 compounds using SE, UAE and MAE extraction techniques with ethyl acetate as the solvent. The x- and y-axes have been set to the same value for a quick visual evaluation of the more sensitive method, i.e., negative or positive deviations of the slope from unity.

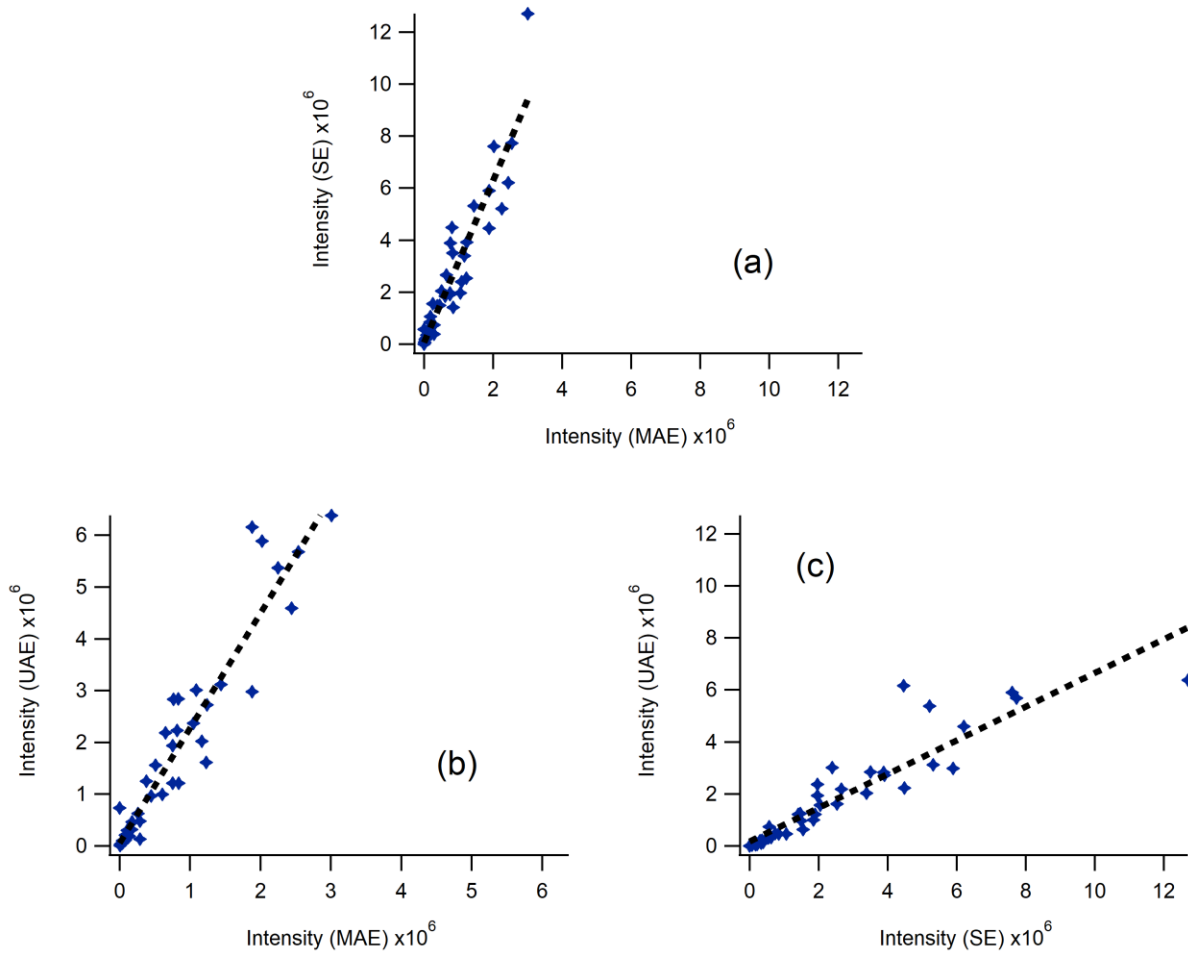


Figure S5. Comparison of LC-MS signals for 45 compounds using SE, UAE and MAE extraction techniques with dichloromethane as the solvent. The x- and y-axes have been set to the same value for a quick visual evaluation of the more sensitive method, i.e., negative or positive deviations of the slope from unity.

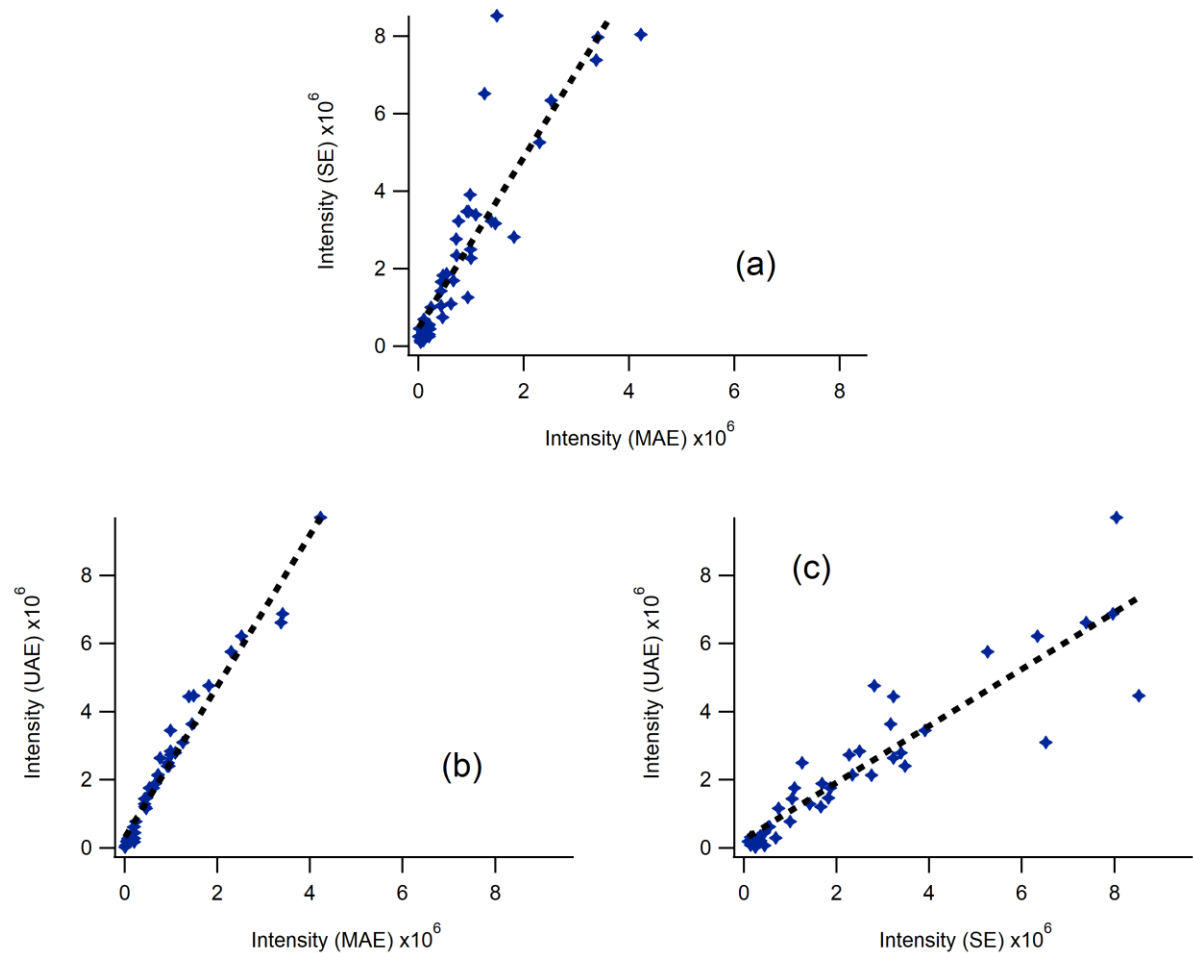


Figure S6. Comparison of LC-MS signals for 45 compounds using SE, UAE and MAE extraction techniques with a 1:4 mixture of hexane and ethyl acetate as the solvent. The x- and y-axes have been set to the same value for a quick visual evaluation of the more sensitive method, i.e., negative or positive deviations of the slope from unity.

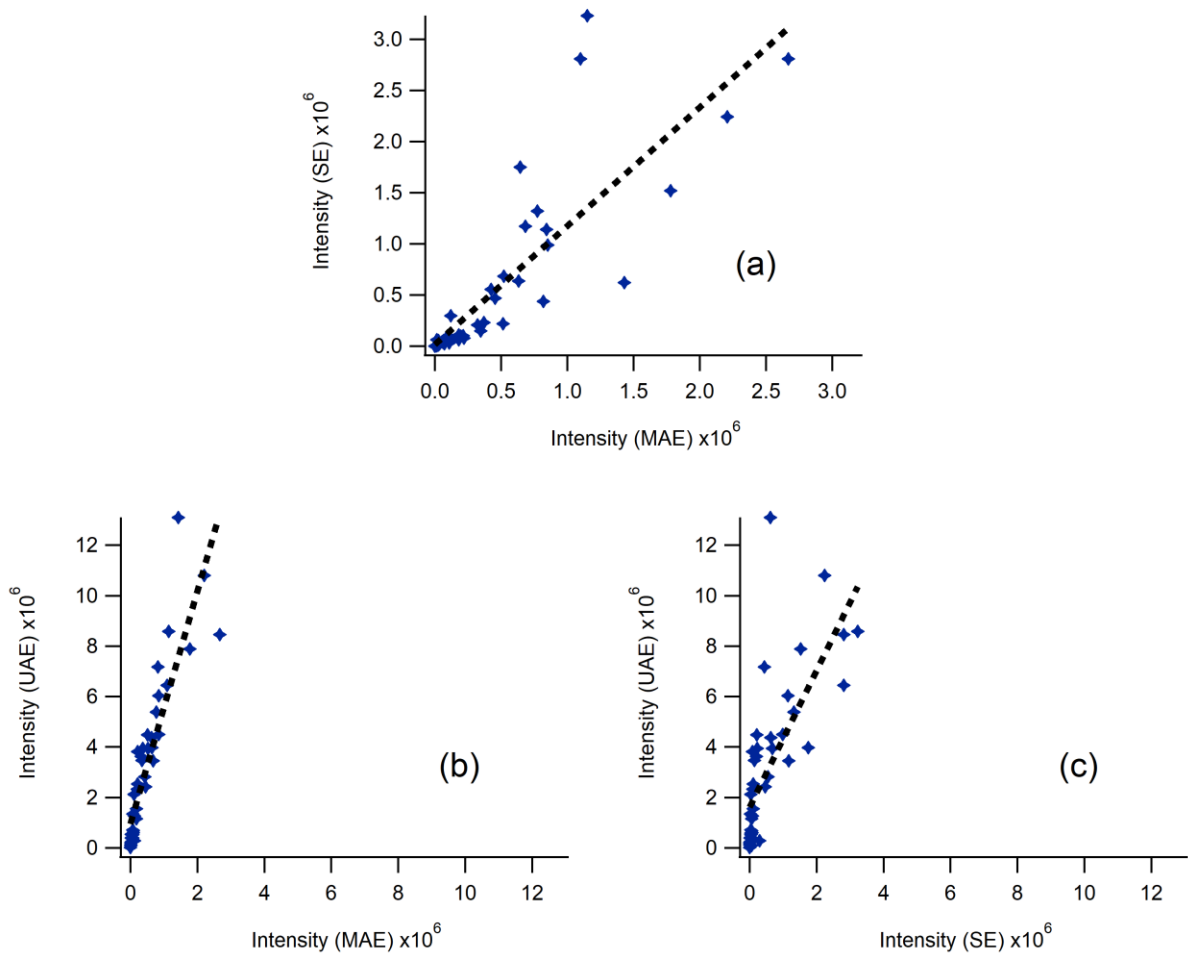


Figure S7. Comparison of LC-MS signals for 45 compounds using SE, UAE and MAE extraction techniques with a 1:1 mixture of hexane and ethyl acetate as the solvent. The x- and y-axes have been set to the same value for a quick visual evaluation of the more sensitive method, i.e., negative or positive deviations of the slope from unity.

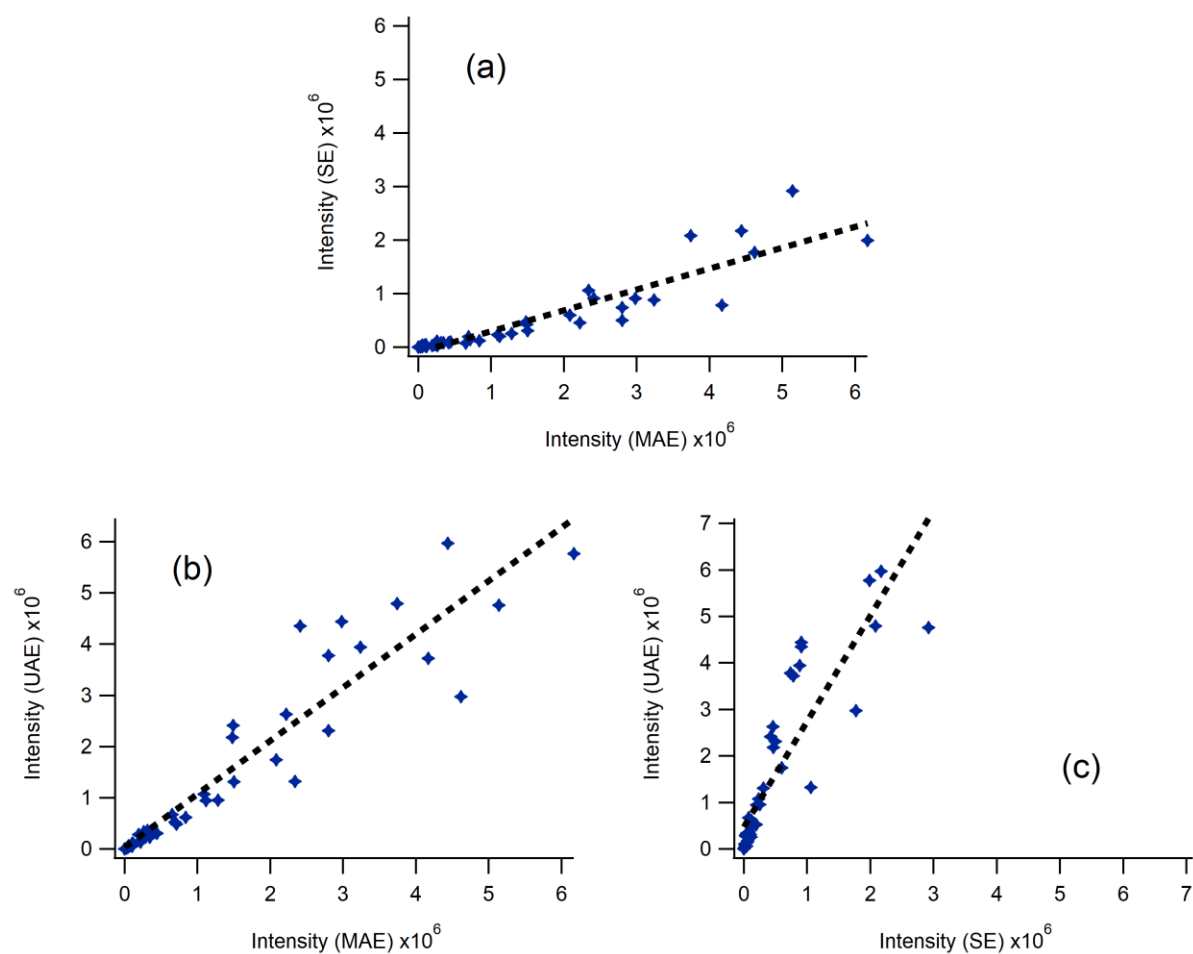


Figure S8. Comparison of LC-MS signals for 45 compounds using SE, UAE and MAE extraction techniques with a 4:1 mixture of hexane and ethyl acetate as the solvent. The x- and y-axes have been set to the same value for a quick visual evaluation of the more sensitive method, i.e., negative or positive deviations of the slope from unity.

