

Supporting Information:

Quantification of Thiazolidine-4-carboxylic Acid in Toxicant-exposed Cells by Isotope-dilution Liquid Chromatography Mass Spectrometry Reveals Intrinsic Antagonistic Response to Oxidative Stress-Induced Toxicity

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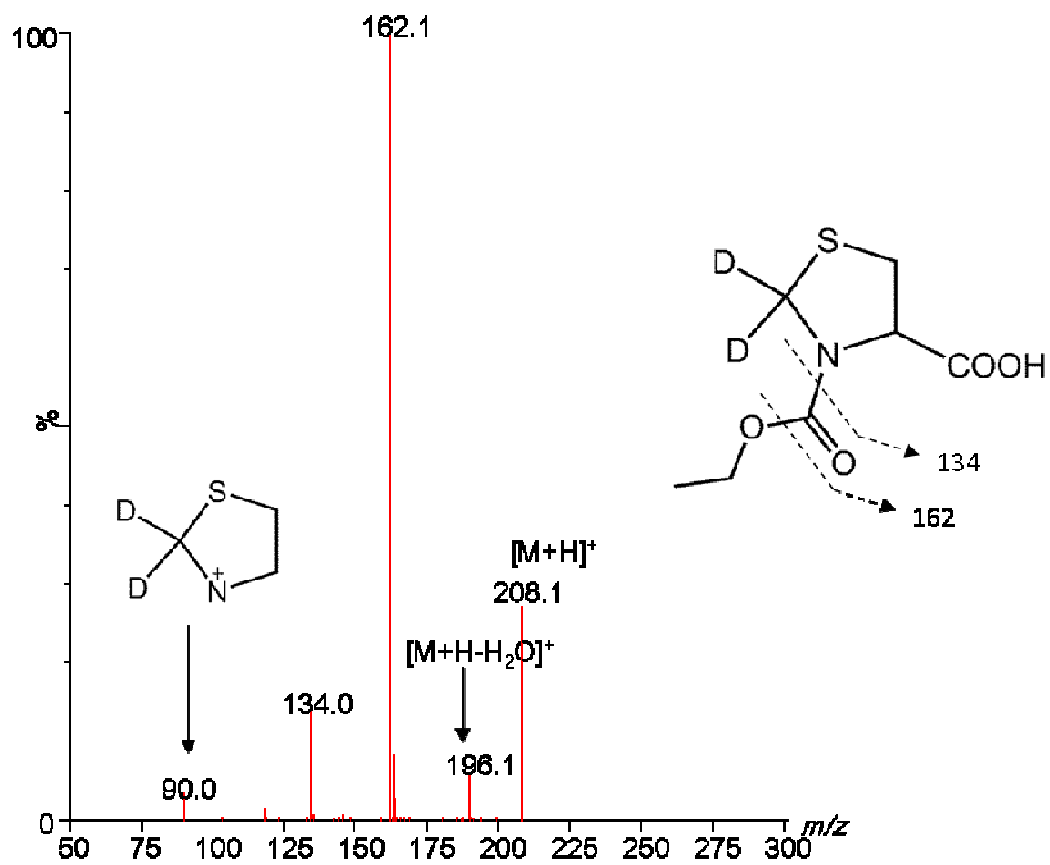


FIGURE S1. ESI-MS/MS spectrum of the pseudo-molecular ion $[M+H]^+$ ion of the isotope-labelled internal standard 3-(ethoxycarbonyl)thiazolidine-4-carboxylic acid- d_2 at m/z 208 and the cleavage reactions for the formation of major fragment ions found in MS/MS analysis.

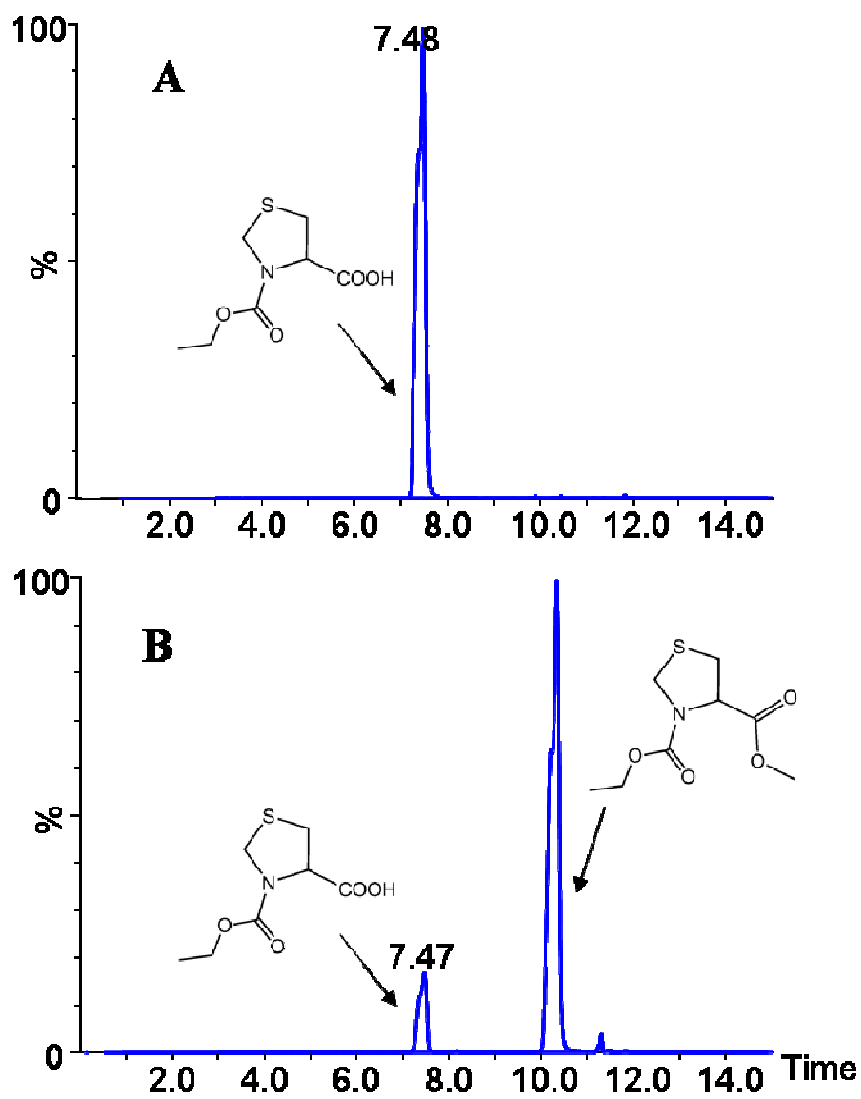


FIGURE S2: Total ion chromatograms obtained from LC-MS analyses of reaction mixture: (A) derivatized using the method developed in this study and (B) obtained from double derivatization with esterification and ethoxycarbonylation.

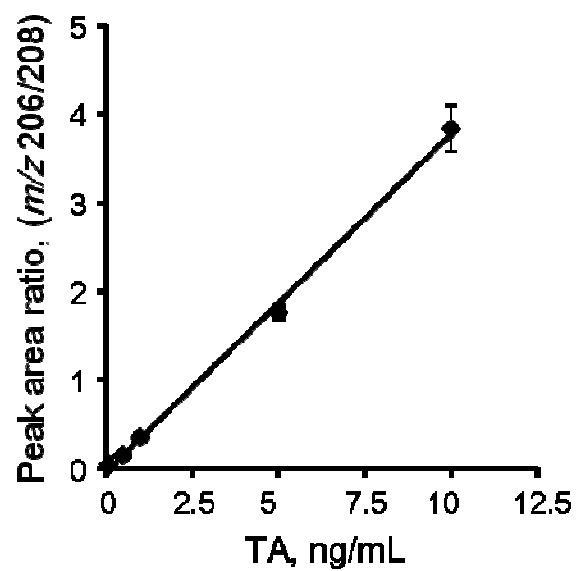


FIGURE S3. Calibration curve for TA obtained using derivatized TA-d₂ as internal standard.

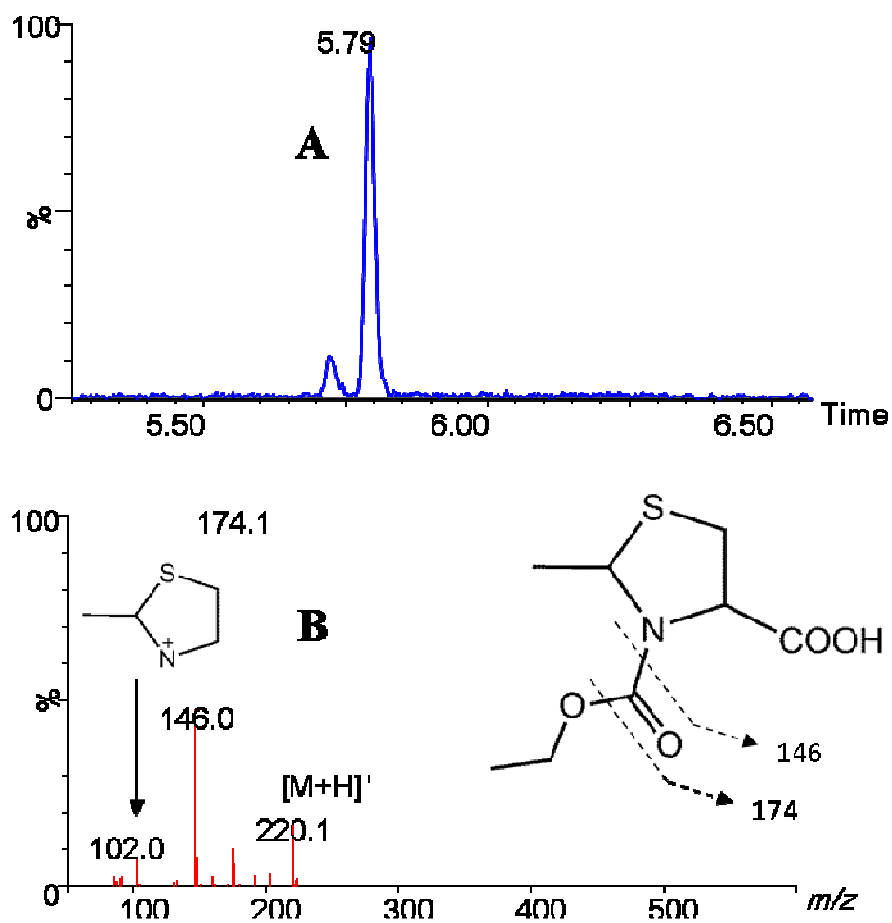


FIGURE S4. (A) Chromatogram obtained from reversed-phase UPLC analysis of ECF-derivatized 2-methyl-1,3-thiazolidine-4-carboxylic acid. (B) ESI-MS/MS spectrum of the pseudo-molecular ion $[M+H]^+$ ion of the ECF-derivatized 2-methyl-1,3-thiazolidine-4-carboxylic acid at m/z 220 and the cleavage reactions for the formation of major fragment ions found in MS/MS analysis.