Demonstration of Compound Independent Calibration for four sulfur-containing compounds (sulfate, cysteine, glutathione and methionine) in isocratic HPLC-ICP-MS. Four different ICP-MS instruments were evaluated.



Figure 1. Demonstration of Compound Independent Calibration (CIC) for sulfur in HPLC-ICP-MS using the HP-4500 quadrupole instrument operated under Cool Plasma conditions at m/z=48 (SO⁺).



Figure 2. Demonstration of Compound Independent Calibration (CIC) for sulfur in HPLC-ICP-MS using the Thermo XSeries II quadrupole instrument with O_2 as reactive gas in the collision cell at m/z=48 (SO⁺).



Figure 3. Demonstration of Compound Independent Calibration (CIC) for sulfur in HPLC-ICP-MS using the Element 2 double focusing instrument at m/z=32 and medium resolution mode (R=4000). Error bars represent the standard uncertainty of three replicates.



Figure 4. Demonstration of Compound Independent Calibration (CIC) for sulfur in HPLC-ICP-MS using the Neptune multicollector instrument at m/z=32 and pseudo high resolution mode. Error bars represent the standard uncertainty of three replicates.