

1 *Electronic Supplementary Information for*

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3 **High-sensitivity tracing of stable isotope labeled Ag**
4 **nanoparticles in environmental samples**
5 **using MC-ICP-MS**

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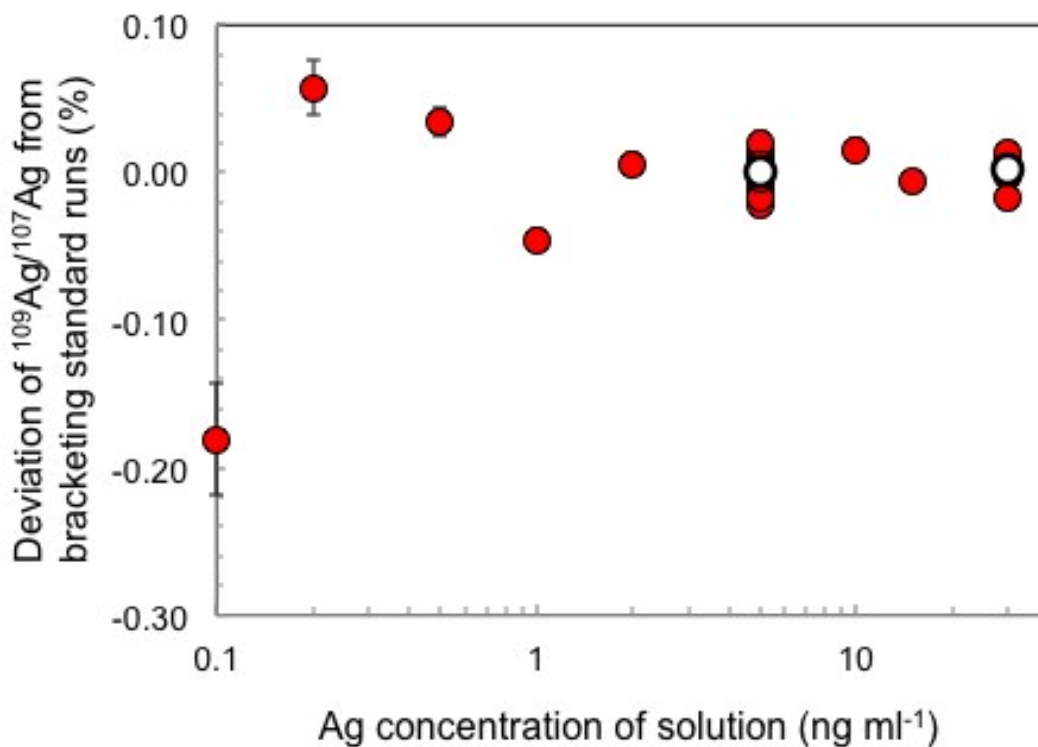
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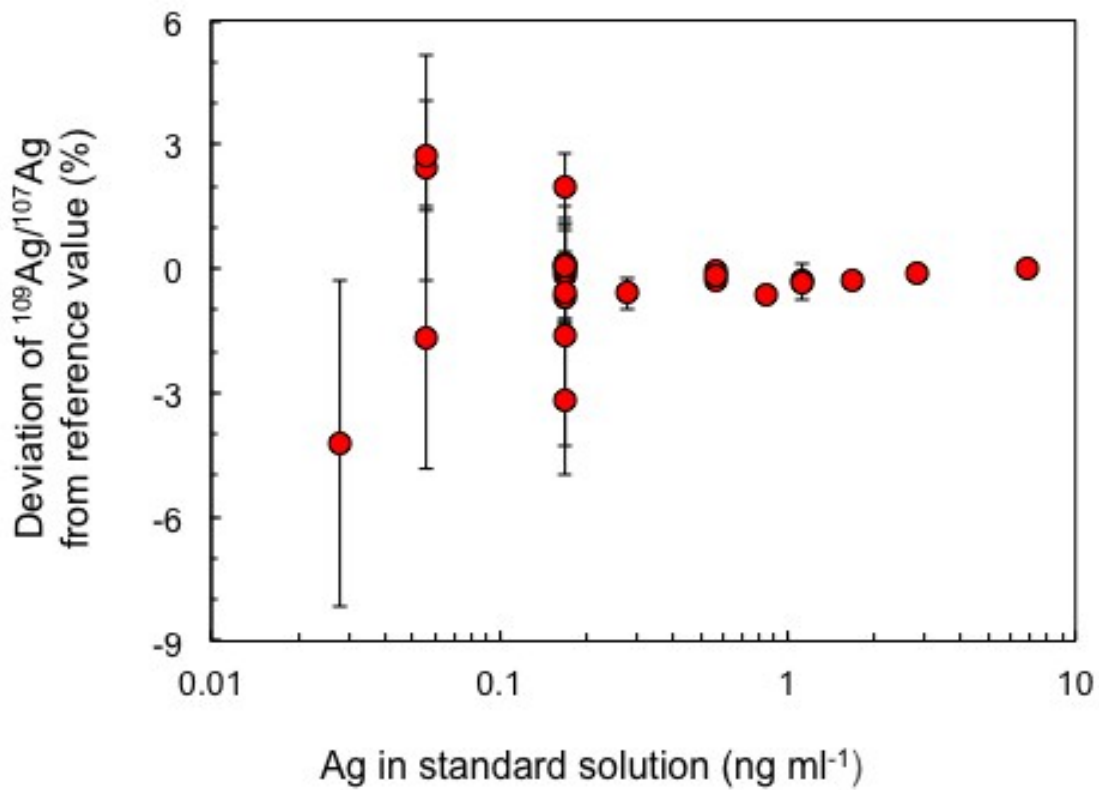
30 **Fig. S1.** Relative deviation (in %) of measured $^{109}\text{Ag}/^{107}\text{Ag}$ ratios for natural Ag solutions
31 from the mean result obtained for bracketing standards runs, which were conducted using Ag
32 concentrations of 5 ng ml^{-1} and 30 ng ml^{-1} . Red symbols denote results for individual
33 analyses, which show no trend with changing Ag concentration. The open symbols denote the
34 mean results for multiple runs of the 5 ng ml^{-1} and 30 ng ml^{-1} standard solutions. Error bars
35 (often smaller than symbol size) denote the 1 SE within-run error of the measurements.

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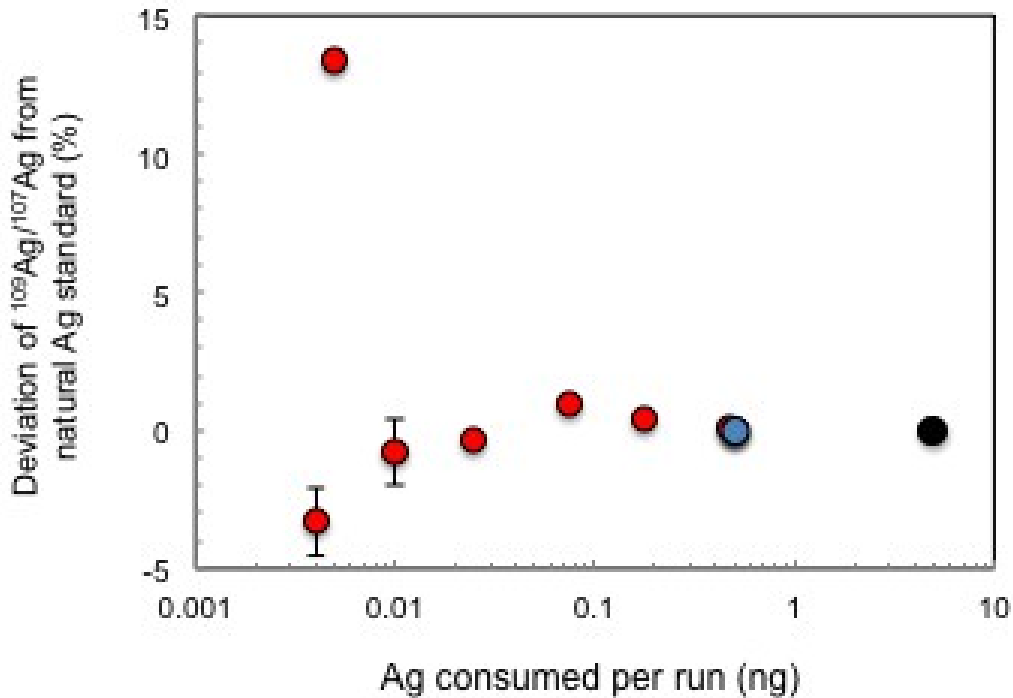
44 **Fig. S2.** Relative deviation (in %) for $^{109}\text{Ag}/^{107}\text{Ag}$ data obtained in individual analyses of
45 mixed Ag-En + Ag-Nat solutions (with $^{109}\text{Ag}/^{107}\text{Ag} \approx 18$) from the reference value (as
46 determined by multiple analyses at high Ag concentration). The error bars denote the 1 SE
47 within-run error of the measurements and are often smaller than the symbol size.

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56 **Fig. S3.** Relative deviation (in %) for the $^{109}\text{Ag}/^{107}\text{Ag}$ ratios of unspiked environmental
57 samples (with only Ag-Nat present) from the reference value. Red symbols denote results for
58 individual sample solutions (see Table 4, main text). The blue symbol denotes the mean value
59 obtained for analyses of several aliquots of a single Lufa 2.2 Soil digest (Soil D1; Table 4,
60 main text). The black symbol is the mean value for multiple analyses of a 5 ng ml^{-1} natural Ag
61 standard solution. Error bars (often smaller than symbol size) denote the 1 SD determined
62 from multiple sample analyses (see Table 4, main text).

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