Supplementary Information

Label-free DNA Assay by Metal Stable Isotope Detection

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Content

Table S1. Potential Polyatomic Interferences to ^{63}Cu and ^{65}Cu in ICPMS.

Isotope	Mass of Atom (u)	Abundance %	Interference	Mass of Interference (u)
^{63}Cu	62.929601	69.17	$^{31}P^{16}O_2^+$,	62.963592
			$^{40}Ar^{23}Na^+$,	62.963768
			$^{47}Ti^{16}O^+$,	62.952361
			$^{23}Na^{40}Ca^+$,	62.956433
			$^{46}Ca^{16}O^1H^+$,	62.952153
			$^{36}Ar^{12}C^{14}N^1H^+$,	62.968977
			$^{14}N^{12}C^{37}Cl^+$,	62.946679
			$^{16}O^{12}C^{35}Cl^+$	62.978445
^{65}Cu	64.927794	30.83	$^{49}Ti^{16}O^+$,	64.942786
			$^{32}S^{16}O_2{}^1H^+$,	64.969726
			$^{40}Ar^{25}Mg^+$,	64.94822
			$^{48}Ca^{16}O^1H^+$,	64.955274
			$^{36}Ar^{14}N_2{}^1H^+$,	64.943529
			$^{32}S^{33}S^+$,	64.981519
			$^{32}S^{16}O^{17}O^+$,	64.961288
			$^{33}S^{16}O_2^+$,	64.966118
			$^{12}C^{16}O^{37}Cl^+$,	64.960818
			$^{12}C^{18}O^{35}Cl^+$,	64.968013
			$^{31}P^{16}O^{18}O^+$	64.967837

Table S2. The Detection of Target DNA in Five Spiked Human Serum Samples.

No.	Added /pM	Detected /pM	RSD /%	Recovery /%
1	100	91	6.6	91
2	150	146	3.2	97
3	200	202	4.1	101
4	300	270	3.9	90
5	500	535	3.5	107