Supplementary Information (SI) for Analyst.
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SUPPORTING INFORMATION

A Colloidal Gold Immunochromatographic Assay for On-site Lead Detection in Vegetable Oil

Contents

Steps for pre-treatment of samples for analysis by ICP-MS.

First, 0.5 g of the sample was placed in an appropriate container, then 5 mL of HNO_3, and 3 mL of H_2O_2 are added. The sample was heated until thick white smoke appears. After cooling to room temperature, 2 mL of HNO_3 was added, and the sample is heated again to dissolve the soluble residue. The sample was then filtered through a 25 nm filter membrane and finally analyzed by ICP-MS.[1, 2]

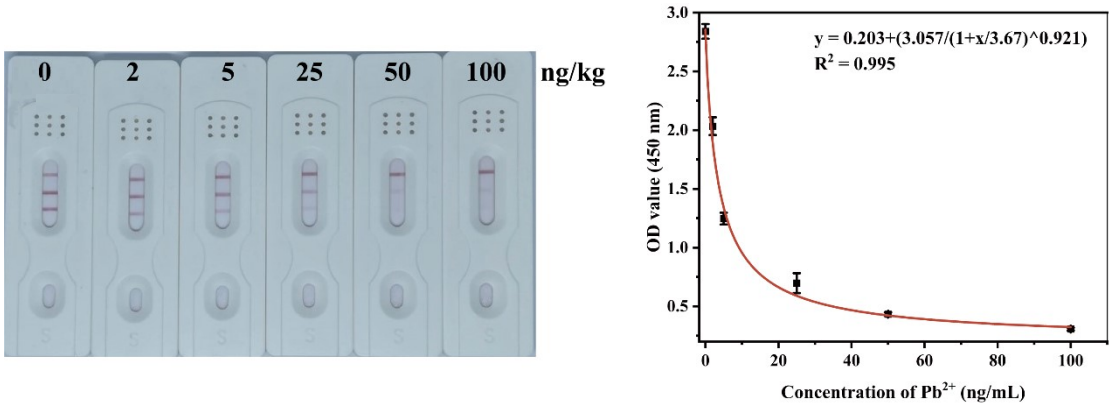

Fig. S1. The standard curve of CGIA in PBS.

Table S1. The comparison of methods in Pb determination.

Method	Samples	Analyte	LOD (mg/kg)	Time	Reference
Atomic absorption spectrometry	Edible oil	Pb	0.010	> 30 min	[3]
Graphite Furnace Atomic Absorption Spectrometry	Vegetable oil	Pb	0.016	> 30 min	[4]
Inductively Coupled Plasma - Mass Spectrometry	Edible oil	Pb	0.5	> 1 h	[5]
CGIA	Vegetable oil	Pb	0.021	< 30 min	This study

References

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