Electronic Supplementary Material (ESI) for Analytical Methods. This journal is © The Royal Society of Chemistry 2021

Supplementary data

Application of new N and S doped amorphous carbon in D-µSPE and its combination with deep eutectic solvent-based DLLME for the extraction of some mycotoxins from soymilk

Anahid Rezaeefar^{1,2}, Mir Ali Farajzadeh^{3,4}, Mahbbob Nemati⁵, Mohammad Reza Afshar Mogaddam^{5, 6,*}

Farzaneh Lotfipour^{4,*}

¹ Student Research Committee, Tabriz University of Medical Sciences, Tabriz, Iran

² Department of Pharmaceutics and Food, Faculty of Pharmacy, Tabriz University of Medical Sciences, Tabriz, Iran

³ Department of Analytical Chemistry, Faculty of Chemistry, University of Tabriz, Tabriz, Iran

⁴ Engineering Faculty, Near East University, 99138 Nicosia, North Cyprus, Mersin 10, Turkey

⁵ Food and Drug Safety Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

⁶ Pharmaceutical Analysis Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

First corresponding author: Dr. M.R. Afshar Mogaddam

Tel.: +98 4133372450

Fax: 98 4133344798

Email: mr.afsharmogaddam@yahoo.com; afsharmogaddam@tbzmed.ac.ir

Second corresponding author: Professor F. Lotfipour

Tel.: +98 4133372450

Fax: 98 4133344798

Email: farzaneh.lotfipour@gmail.com

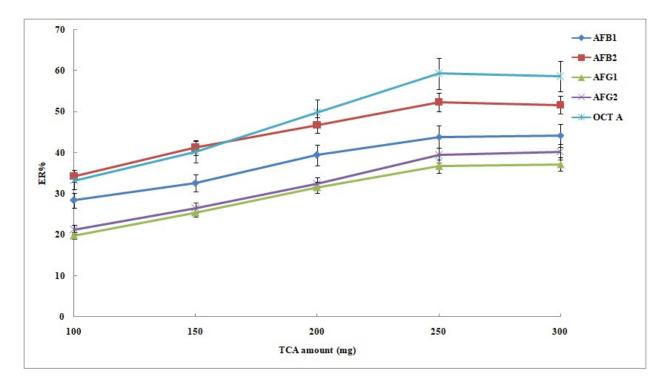


Fig. S1. Optimization TCA amount.

Extraction conditions: sample, 10 mL blank soymilk spiked with the analytes at a concentration of 15 ng/L (each analyte); sorbent amount, 250 mg; vortexing time, 2 min; elution solvent type (volume), ACN

(1.0 mL), desorption time, 2 min; extraction solvent type (volume) used in DLLME; ChCl: p-

chlorophenol: alpha-terpineol DES (100 µL); and centrifugation time (speed), 5 min (4000 rpm). The

error bars indicate minimum and maximum values of three determinations.

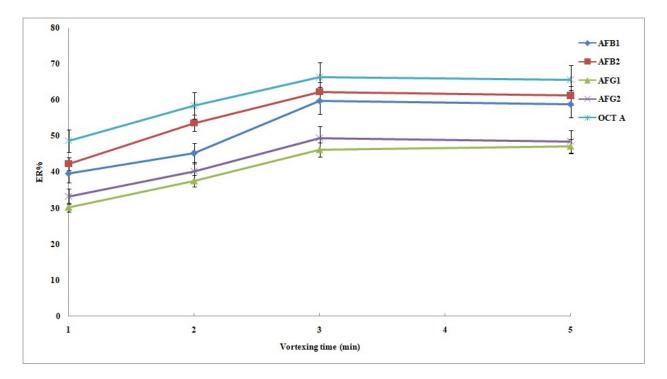


Fig. S2. Optimization of vortexing time.

Extraction conditions: are the same as those used in Fig. S1, except 3 min were selected for vortexing time.

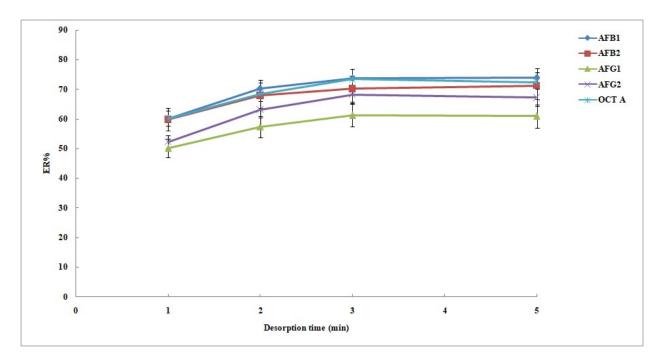


Fig. S3. Optimization of desorption time.

Extraction conditions: are the same as those used in Fig. S2 except 150 mg and 3 min were selected for

the sorbent amount and vortexing time, respectively.

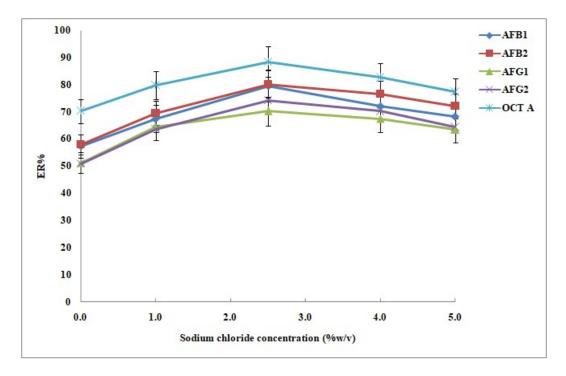


Fig. S4. Salt addition effect.

Extraction conditions: are the same as those used in Fig. S2, except 3 min was selected as the desorption

time.