Supplementary Materials: Simultaneous Determination of the Main Peanut Allergens in Foods Using Disposable Amperometric Magnetic Beads-Based Immunosensing Platforms

Víctor Ruiz-Valdepeñas Montiel, Rebeca Magnolia Torrente-Rodríguez, Susana Campuzano, Alessandro Pellicanò, Ángel Julio Reviejo, Maria Stella Cosio and José Manuel Pingarrón

Table S1. Optimized experimental variables affecting the performance of the electrochemical dual MBs-based immunosensing platform for the simultaneous determination of Ara h 1 and Ara h 2.

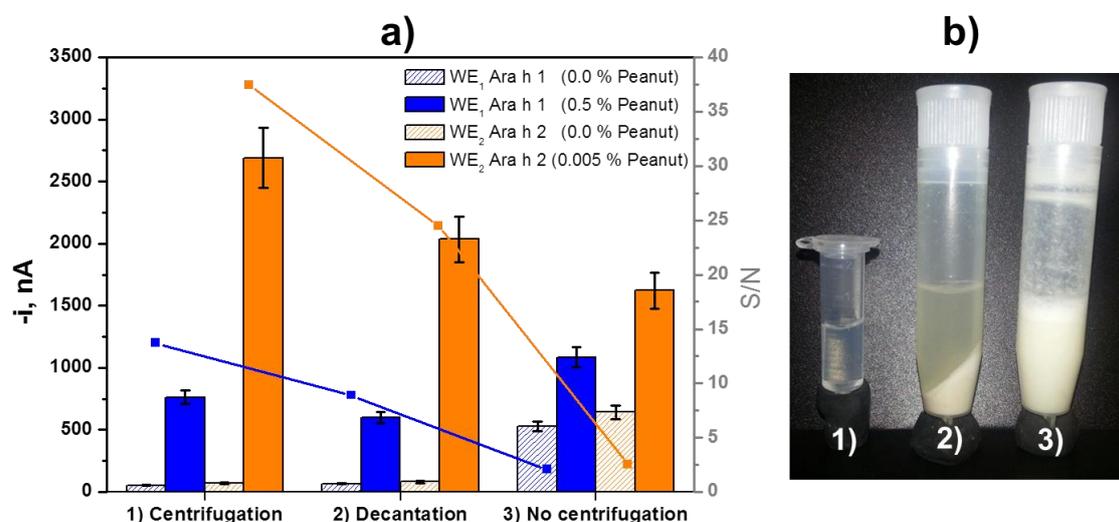|	Selected Value	
Variable	Ara h 1	Ara h 2
HOOC–MBs, μL	3.0	3.0
[AbC], μg/mL	25.0	50.0
[AbD], Dilution	1/10,000	1/1000
[Strep-HRP], Dilution	1/1000	-
[F(ab')$_2$-HRP], Dilution	-	1/10,000
AbC incubation time, min	30	
Antigen incubation time, min	45	
AbD incubation time, min	45	
Labeling incubation time, min	30	

Figure S1. (**a**) Current values measured with the dual immunosensing platform from extracts prepared with unspiked and spiked with 0.5 (Ara h 1) and 0.005 (Ara h 2) % (*w/w*) wheat flour using different sample treatments: protocol described in Section 2.4 (1); centrifugation steps were substituted by a 30-min natural decantation process (2); centrifugation steps were omitted (3). (**b**) Real picture of the extracts obtained after applying each sample treatment. Supporting electrolyte, 0.05 M sodium phosphate solution, pH 6.0; E$_{app}$ = –0.20 V vs. Ag pseudo-reference electrode. Error bars estimated as triple of the standard deviation (*n* = 3).