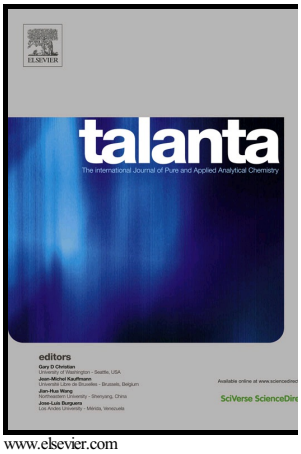

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Phage-free peptide ELISA for ochratoxin A detection based on biotinylated mimotope as a competing antigen

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ABSTRACT

To perform the biopanning of a mimotope peptide with reduced affinity to anti-ochratoxin A (OTA) monoclonal antibodies (mAbs), we executed two improved biopanning approaches with a commercial 7-mer peptide library. In the first approach, anti-mouse IgG antibodies were used to erect the anti-OTA mAbs; in the second approach, an ultralow OTA concentration (0.1 ng/mL) was used to perform the competitive elution of phage particles. After the fourth round of biopanning was completed, 30 identified clones were positive phage particles; of these phage particles,