Detection of Ochratoxin A in Red Wine Based on a Structure-Switching Aptamer Using a Personal Glucometer

*Chunmei Gu†, Feng Long‡**, Xiaohong Zhou†, Hanchang Shi†**

†State Key Joint Laboratory of ESPC, School of Environment, Tsinghua University, Beijing 100084, China

‡School of Environment and Natural Resources, Renmin University of China, Beijing, 100872, China

Corresponding author: *hanchang@tsinghua.edu.cn;

Co-corresponding author: **longf04@mails.tsinghua.edu.cn;

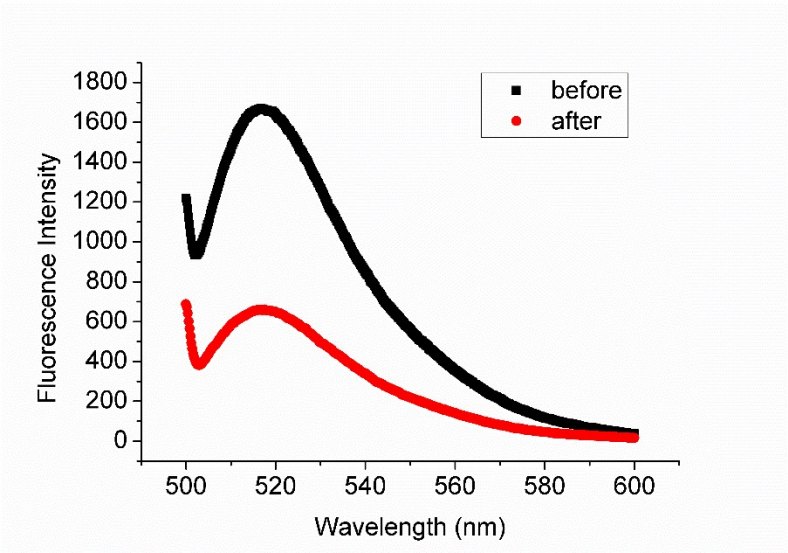

Figure S1. Fluorescence spectrum of aptamer-FAM-competitor before and after coupling with magnetic beads.

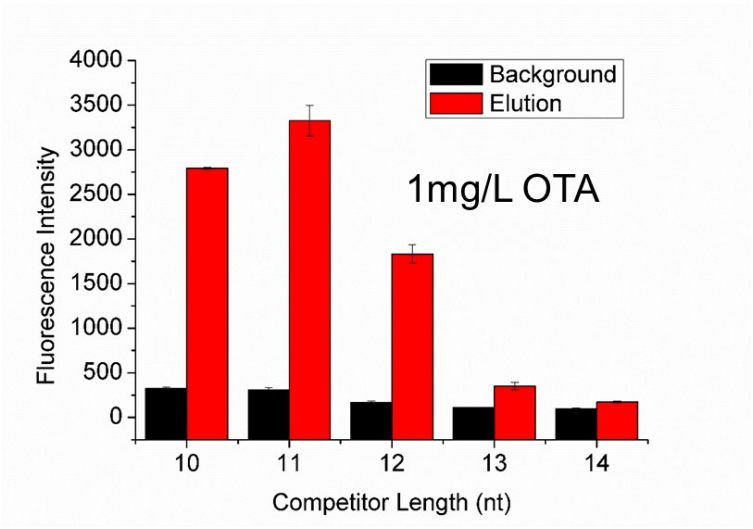

Figure S2. Background release and target elution with 1mg/L OTA at different competitor length.

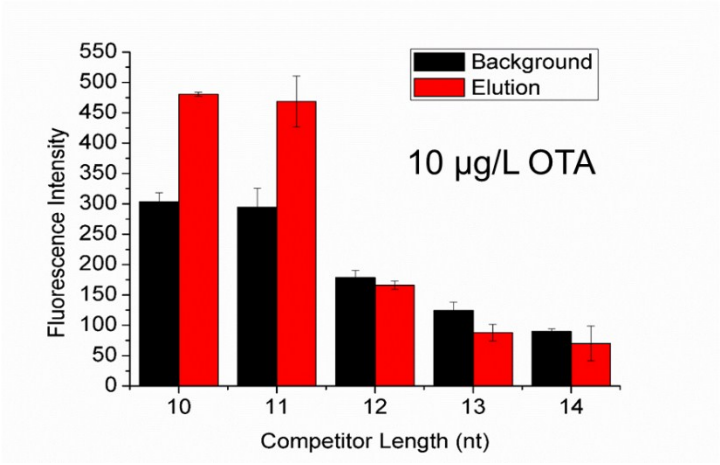

Figure S3. Background release and target elution with 10μg/L OTA at different competitor length.

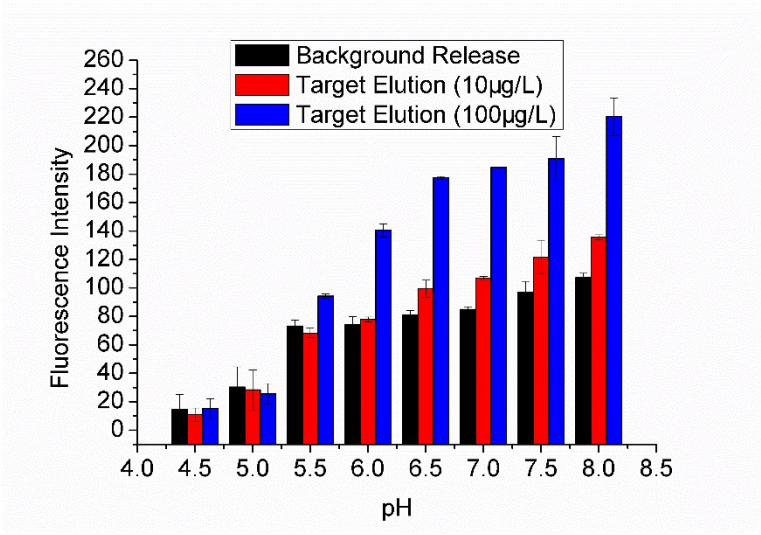

Figure S4. Background release and target elution with 10μg/L OTA and 100μg/L OTA at different pH.

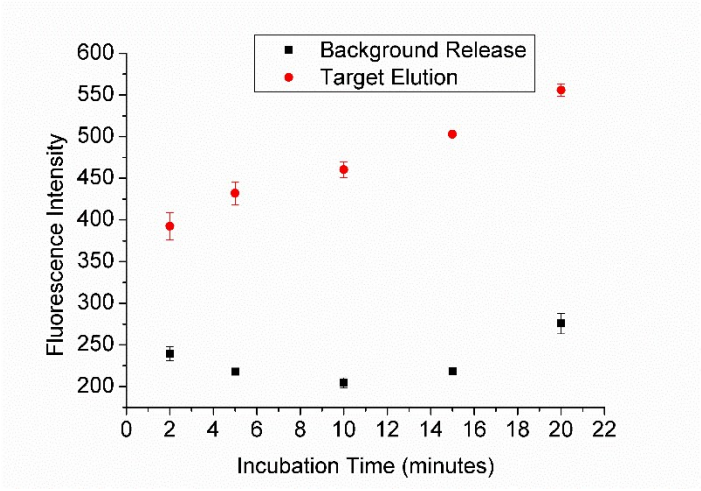

Figure S5. Background release (no OTA) and target elution (100 μg/L OTA) at different incubation time.

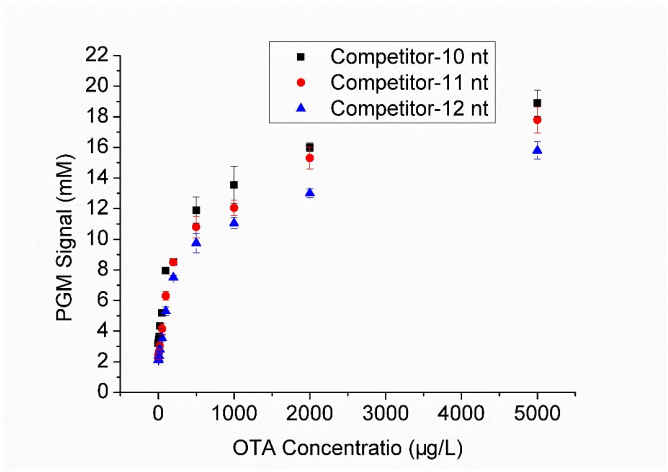

Figure S6. Performance of using structure-switching aptamer and PGM to detect OTA in buffer with different competitor-invertase.

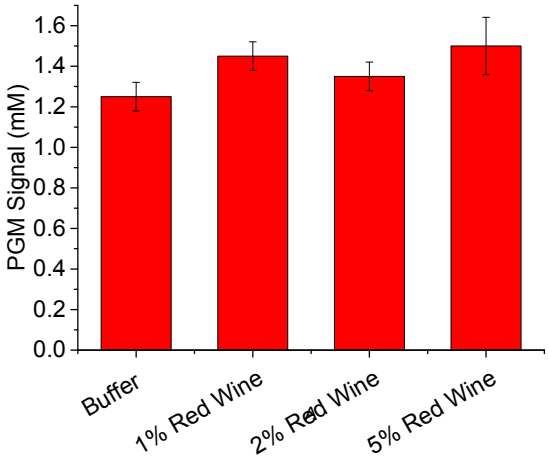

Figure S7. Influence of content in red wine on the activity of invertase.