

Highly sensitive label-free in vitro detection of aflatoxin B1 in an aptamer assay using optical planar waveguide operating as a polarization interferometer

AL-JAWDAH, A., NABOK, Aleksey <<http://orcid.org/0000-0002-9078-1757>>, ABU-ALI, H., CATANANTE, G., MARTY, J.L. and SZEKACS, A.

Available from Sheffield Hallam University Research Archive (SHURA) at:

<http://shura.shu.ac.uk/25202/>

This document is the author deposited version. You are advised to consult the publisher's version if you wish to cite from it.

Published version

AL-JAWDAH, A., NABOK, Aleksey, ABU-ALI, H., CATANANTE, G., MARTY, J.L. and SZEKACS, A. (2019). Highly sensitive label-free in vitro detection of aflatoxin B1 in an aptamer assay using optical planar waveguide operating as a polarization interferometer. *Analytical and Bioanalytical Chemistry*, 411 (29), 7717-7724.

Copyright and re-use policy

See <http://shura.shu.ac.uk/information.html>

Analytical and Bioanalytical Chemistry

Electronic Supplementary Material

Highly sensitive label-free in vitro detection of aflatoxin B1 in an aptamer assay using an optical planar waveguide operating as a polarization interferometer

Ali Al-Jawdah, Alexei Nabok, Hisham Abu-Ali, Gaelle Catanante, Jean-Louis Marty, Andras Szekacs

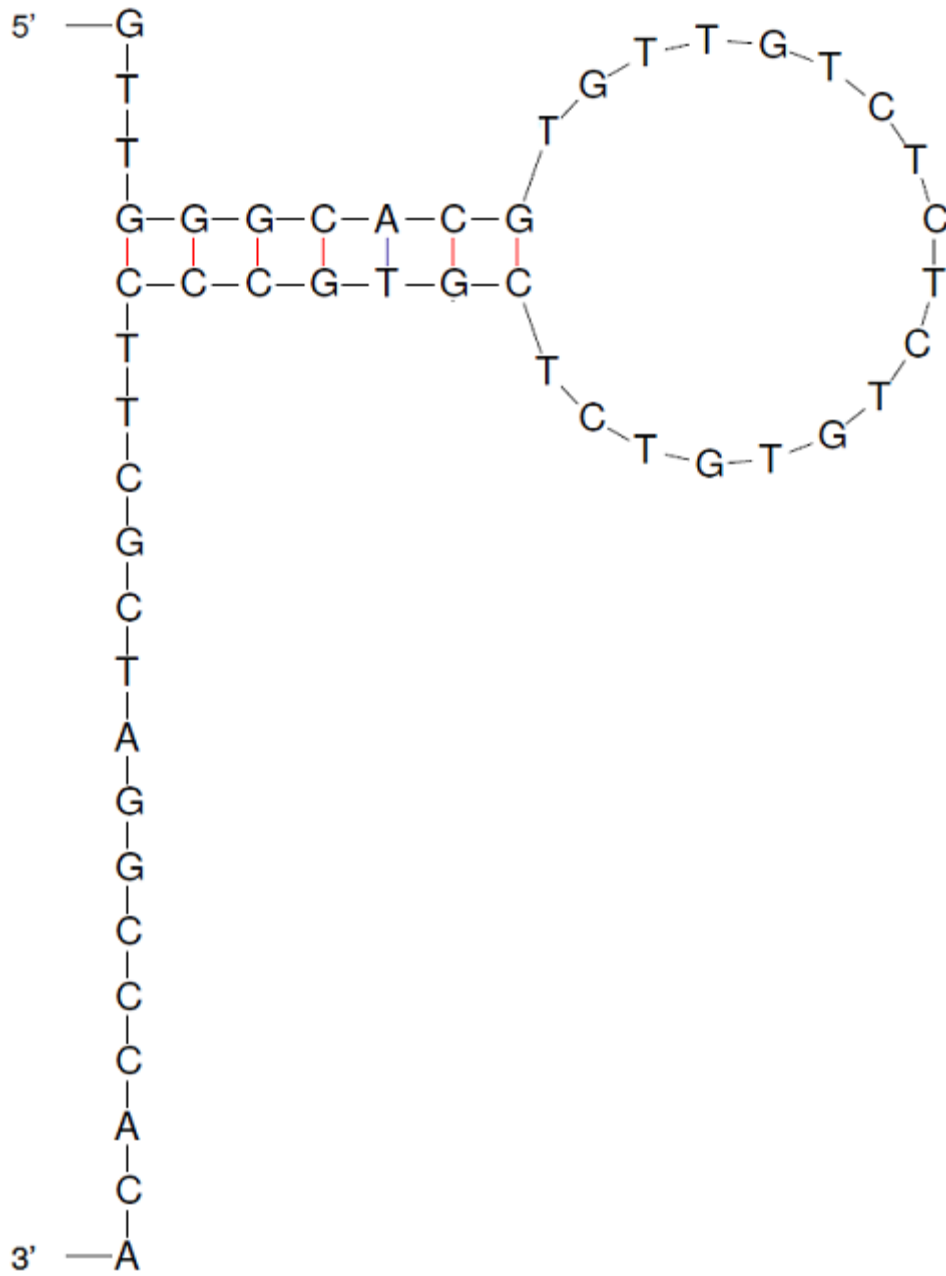
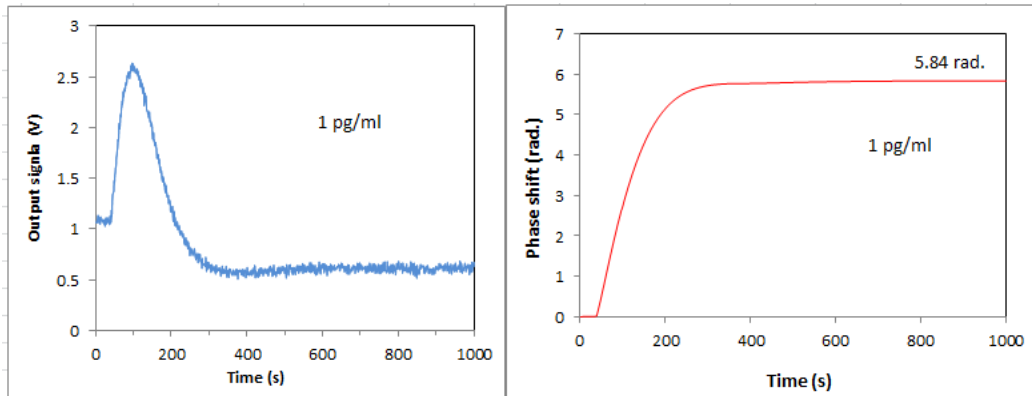
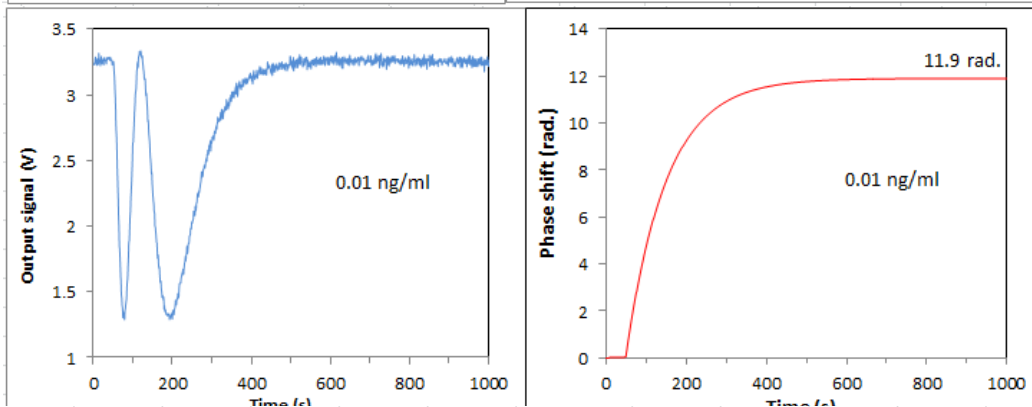


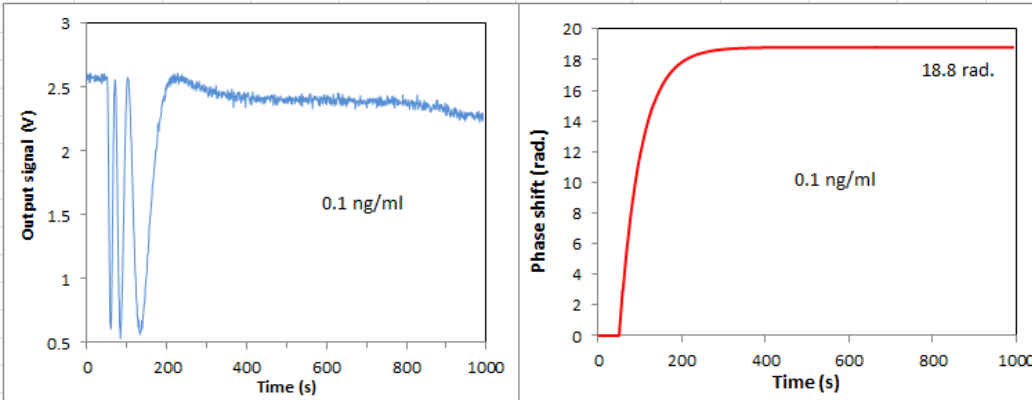
Fig. S1 Secondary structure of anti-aflatoxin B1 aptamer



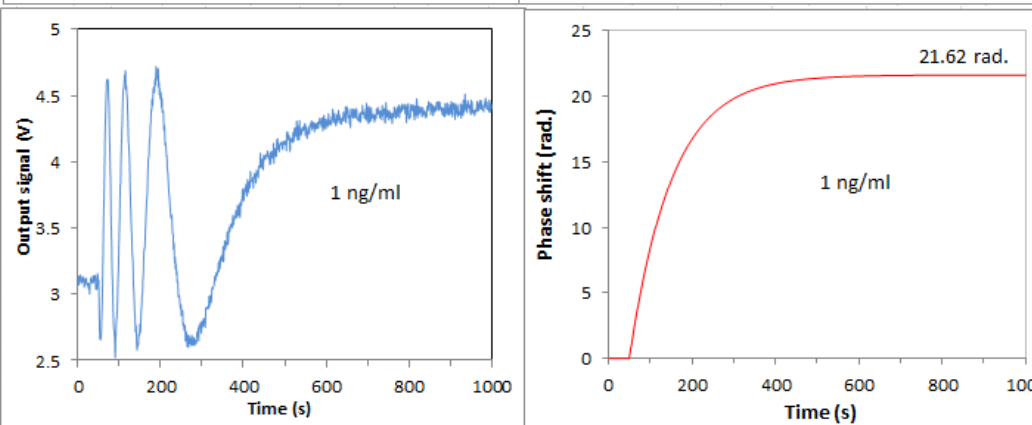
(a)



(b)



(c)



(d)

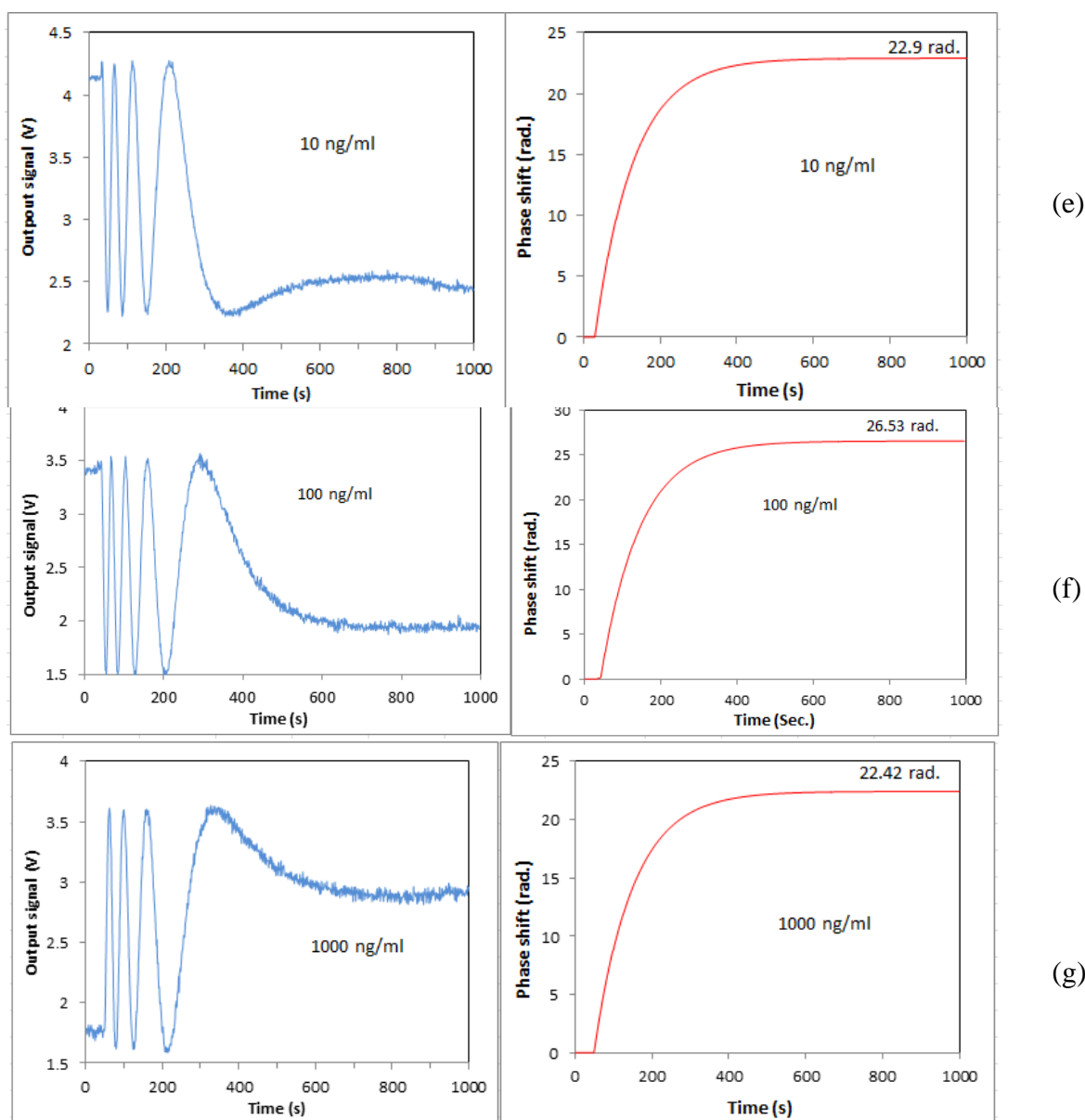


Fig. S2 Output signals (left) and corresponding phase shifts (right) for different concentrations of AFT b1: 0.001 ng/ml (a), 0.01 ng/ml (b), 0.1 ng/ml (c), 1 ng/ml (d), 10 ng/ml (e), 100 ng/ml (f), and 1000 ng/ml (g)

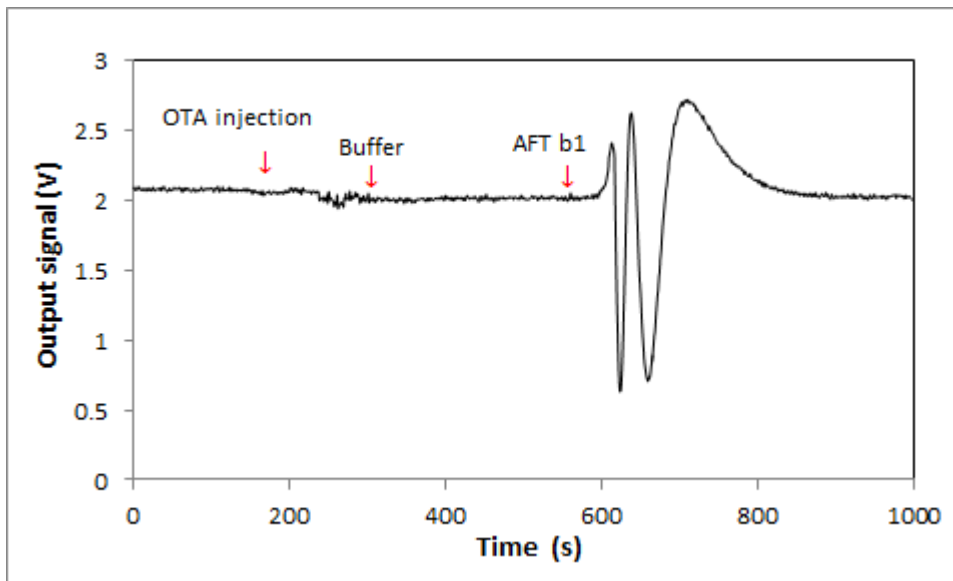


Fig. S3 Negative control data. Output signals caused by injections of OTA (0.01ng/ml) and AFT b1 (0.01 ng/ml). Arrows indicate the moments of injection