Supporting Information

Ultrafast Capillary Electrophoresis Isolation of DNA Aptamer for the PCR Amplification-Based Small Analyte Sensing

Emmanuelle Fiore,[a] Eric Dausse,[b] Hervé Dubouchaud[c], Eric Peyrin[a] , Corinne Ravelet[a*]*

[a]Univ. Grenoble Alpes, DPM UMR 5063, F-38041 Grenoble
CNRS, DPM UMR 5063, F-38041 Grenoble, France

[b]Laboratoire ARNA, Université Bordeaux, Inserm U869, F-33076 Bordeaux, France

[c]Univ. Grenoble Alpes, Laboratoire de Bioénergétique Fondamentale et Appliquée, INSERM U1055, F-38041 Grenoble, France

[*]Corresponding authors: Email: eric.peyrin@ujf-grenoble.fr; corinne.ravelet@ujf-grenoble.fr

Figure S1: Fluorescence anisotropy change Δr of F-St_1A in presence of 2000 μM adenosine under different St_2-AmpA concentrations: 80 nM, 200 nM, 400 nM, 600 nM. F-St_1A: 10 nM. Binding buffer conditions: 10 mM Tris-HCl, pH 7.5, 50 mM NaCl, 10 mM $MgCl_2$; reaction temperature 25°C.

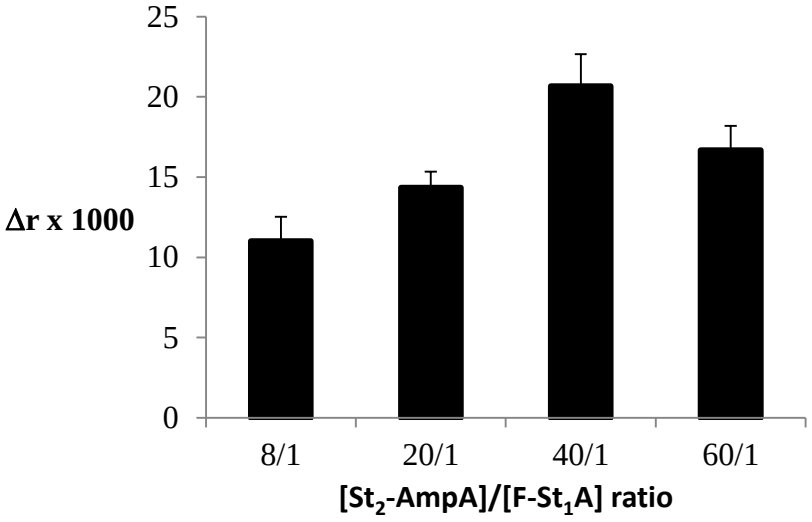

Figure S2 The relative Δr value plotted against the adenosine concentrations using the F-St_1A-St_2A split aptamer (filled square), F-St_1A-St_2-AmpA split fragments (open circle) and F-St_1A-St_2-AmpA-Rev primA hybrid (filled circle). F-St_1A: 10 nM, St_2AmpA: 400 nM, Rev primA: 400 nM. Binding buffer conditions: 10 mM Tris-HCl, pH 7.5, 50 mM NaCl, 10 mM $MgCl_2$; reaction temperature 25°C.

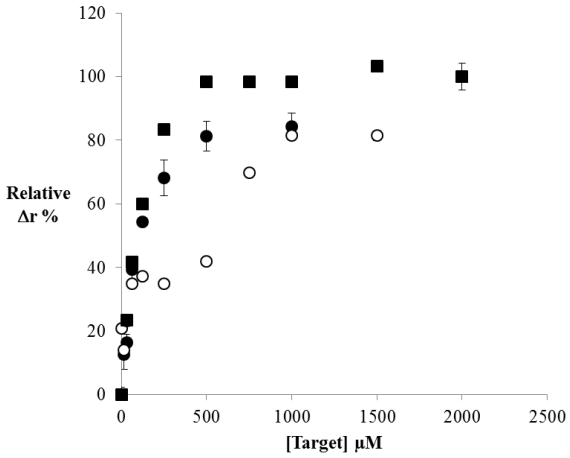

Figure S3: Fluorescence anisotropy change Δr of F-St1-CholB (10 nM) with St_2-AmpB (400 nM) in presence of 125 µM adenosine under different Rev PrimB concentrations: 100 nM, 400 nM, 1600 nM. Binding buffer conditions: 20 mM Tris-HCl, pH 7.5, 25 mM NaCl, 5 mM $MgCl_2$; reaction temperature 25°C.