

Table S1. Current variation of the two aptasensors at 4 °C and 25 °C for ten days.

Sample	I ₀ (Initial current, μA)	I ₁ (μA)	I ₂ (μA)	I ₃ (μA)	I ₄ (μA)	I ₅ (μA)	(I ₅ -I ₀)/I ₀ (%)
E1 (4 °C)	116	115	115	114	113	112	3.45
E2 (4 °C)	104	103	103	102	101	100	3.85
E1 (25 °C)	113	106	101	99.3	98.1	97.2	14.0
E2 (25 °C)	101	99.8	99.1	98.2	97.3	95.6	5.34

Table S2. Determination of thrombin added in human serum with the proposed aptasensor.

Serum samples	Concentration of thrombin added (nM)	Concentration obtained with aptasensor (nM)	Relative standard deviation (%) ^a	Recovery (%)
1	0.150	0.160	4.62	107
2	1.00	1.02	3.26	102
3	5.00	4.63	2.73	92.6
4	15.0	15.8	3.29	105
5	30.0	28.1	2.08	93.7

^aStandard deviation (S) was defined as $S^2 = \sum (C_i - C)^2 / (n-1)$, where C is the average concentration of thrombin obtained with aptasensor by means of three measurements ($n=3, i=1, 2, 3$).

Relative standard deviation (RSD) was defined as $RSD = S/C \times 100\%$