

Enrofloxacin Rapid Detection in Aquatic Foods: based on DNA

Aptamer Sensor

Xiuli Bao^{1,2}, Siyuan Wang^{1,2}, Qingfang Hao^{1,2}, Yue Bai^{1,2}, Siying Li^{1,2}, Shuai Zhang^{1,2}, Lei Zhang^{1,2}, Xinxin Kang^{1,2}, Mingsheng Lyu^{1,2}, Shujun Wang^{1,2,*}

¹Jiangsu Key Laboratory of Marine Bioresources and Environment/Jiangsu Key Laboratory of Marine Biotechnology, Jiangsu Ocean University, Lianyungang, 222005, China

²Co-Innovation Center of Jiangsu Marine Bio-industry Technology, Jiangsu Ocean University, Lianyungang, 222005, China

*Correspondence: sjwang@jou.edu.cn

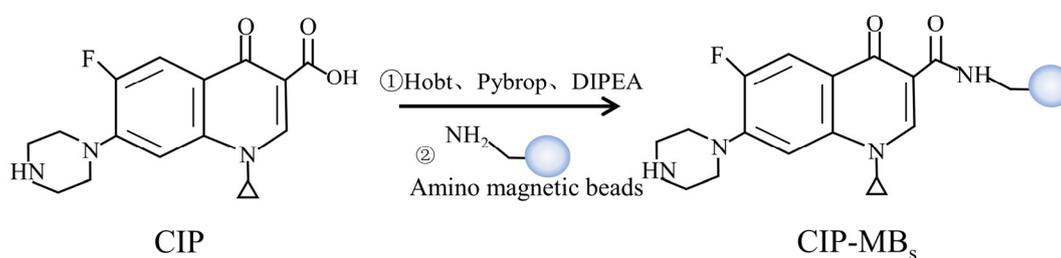


Figure.S1. Schematic diagram of CIP immobilization

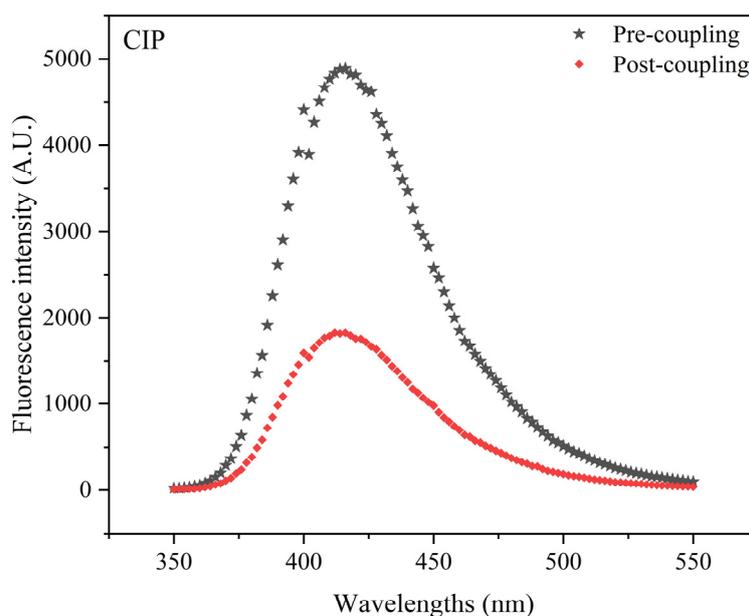


Figure.S2. CIP fluorescence intensity in solution before and after coupling

Table.S1 Candidate aptamer sequences and their characteristics

Name	Sequence (5'-3')	enrichment ratio (%)	dG (kcal/mol)	GC (%)
ENR-Apt 1	GCGGCTGCTTACGGATAGAACCATGG AGCCAATGGAACTTTAGTTGTGCATC TCCCATCCGTAAAGCCCAAGTC	21.2	-8.29	56
ENR-Apt 2	GCGGCTGCTTACGGATAGAACGAGGT ACATGGATGTTAAGCTTACCCGCGGTT GCCCATCCGTAAAGCCCAAGTC	8.62	-8.84	60
ENR-Apt 3	GCGGCTGCTTACGGATAGAAGACGGA TCCGTCGGATATGTTCGTACGAAGCAGG TGCCATCCGTAAAGCCCAAGTC	2.74	-10.92	60
ENR-Apt 4	GCGGCTGCTTACGGATAGAACCACGT ATGTTAACTTGAGGTTAGGCATCGGTC CCCCATCCGTAAAGCCCAAGTC	2.47	-8.14	60
ENR-Apt 5	GCGGCTGCTTACGGATAGAAGCGGGA TCTAGTCAAAGCGGAACGGGATCAAC GAACCATCCGTAAAGCCCAAGTC	1.44	-10.01	64
ENR-Apt 6	GCGGCTGCTTACGGATAGAAGCGGGA TGGAGAAATGAACCGGGGTGGTCCGT TGCCATCCGTAAAGCCCAAGTC	0.69	-11.15	64

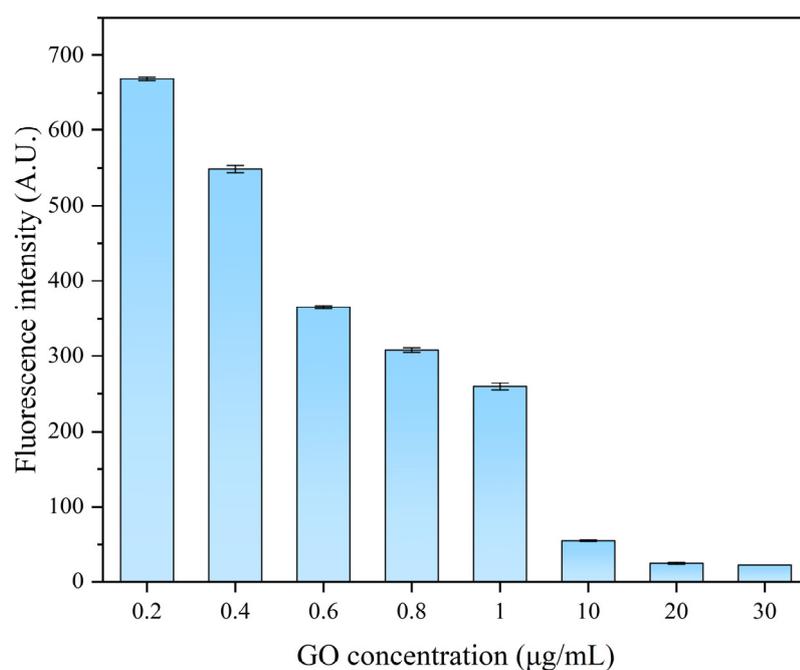


Figure.S3. Effect of fluorescence intensity on GO concentration

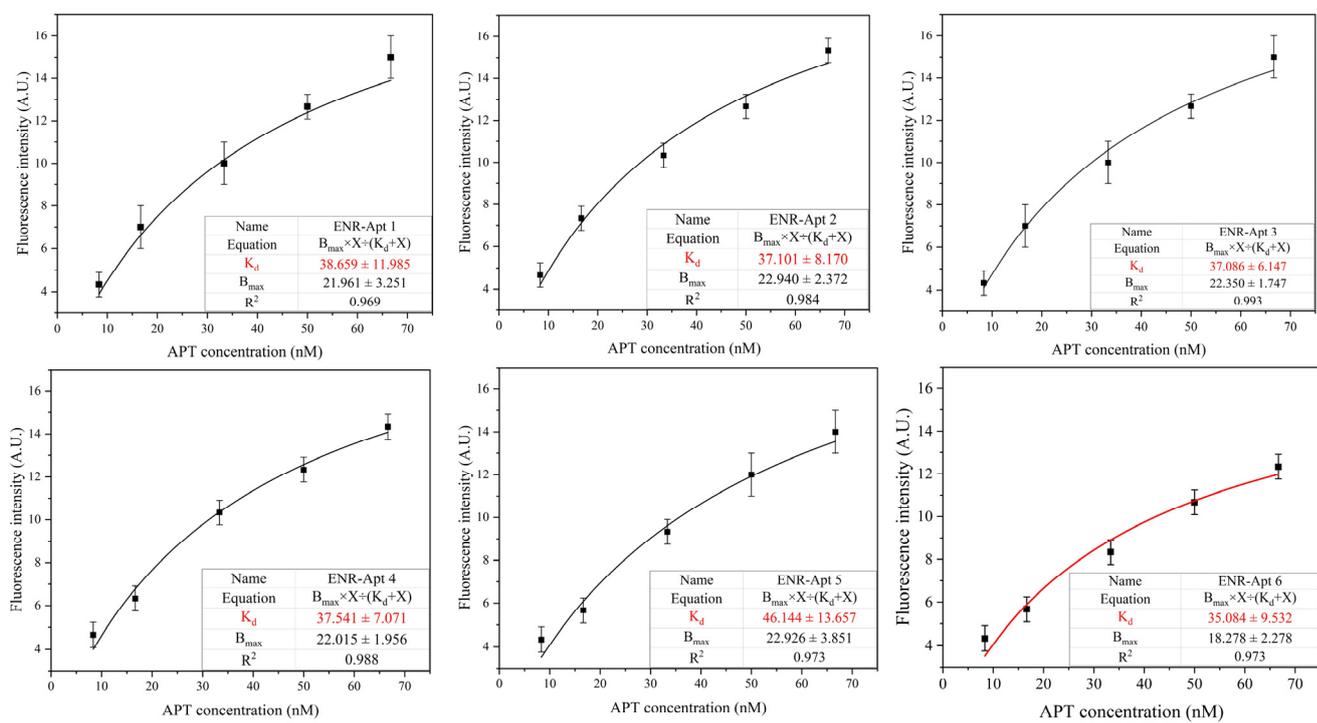


Figure.S4. Six candidate adaptors nonlinear fitting curves