Electronic Supplementary Material (ESI) for Analyst.

Supporting Information

Table S1. Names and sequences of the oligonucleotides.

No.	Name	Sequence (5′-3′)
1	AT24-A6-hairpin	TATATATATATATATATATATATA AAAAAA TATATATATATATATATATATATA
2	ds DNA-A6-hairpin	CTGAAGTTCTGATGACCACGCGCC AAAAAA GGCGCGTGGTCATCAGA ACTTCAG
3	ds DNA	CTGAAGTTCTGATGACCACGCGCC (DNA1) GGCGCGTGGTCATCAGAACTTCAG (DNA2)
4	AT24 ds DNA	TATATATATATATATATATATATA
5	ssDNA-A6	CTGAAGTTCTGATGACCAGCGGCG AAAAAA TTCATCTAGATTGCGGAG GAAGGT
6	AT24-T6-hairpin	TATATATATATATATATATATATA TTTTTT TATATATATATATATATATATATA
7	AT24-G6-hairpin	TATATATATATATATATATATATA GGGGGG TATATATATATATATATATATATA
8	AT24-C6-hairpin	TATATATATATATATATATATATA CCCCCC TATATATATATATATATATATATA
9	AT24-A10-hairpin	TATATATATATATATATATATATA AAAAAAAAAA TATATATATATATATAT ATATA
10	AT24-A15-hairpin	TATATATATATATATATATATATA AAAAAAAAAAAAAAA TATATATATATAT ATATATATATA
11	AT24-A20-hairpin	TATATATATATATATATATATATA AAAAAAAAAAAAAAAAAAAA TATATAT ATATATATATATATATA

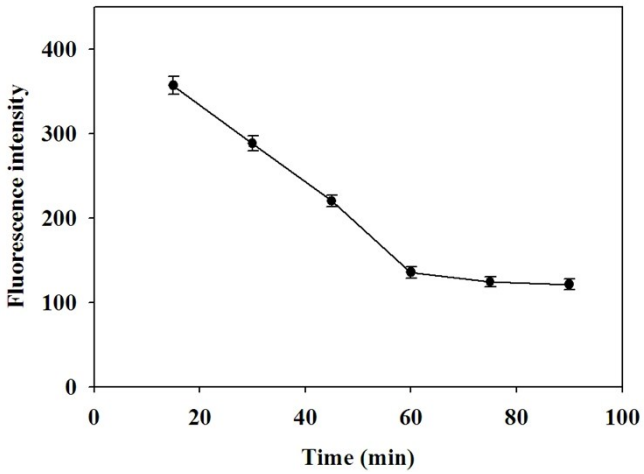

Fig. S2 Effect of S1 nuclease cleavage time on the fluorescence intensity of AT24-A6-hairpin CuNCs. Concentration: AT24-A6-hairpin DNA, 100 nM; S1 nuclease, 0.4 U/mL.

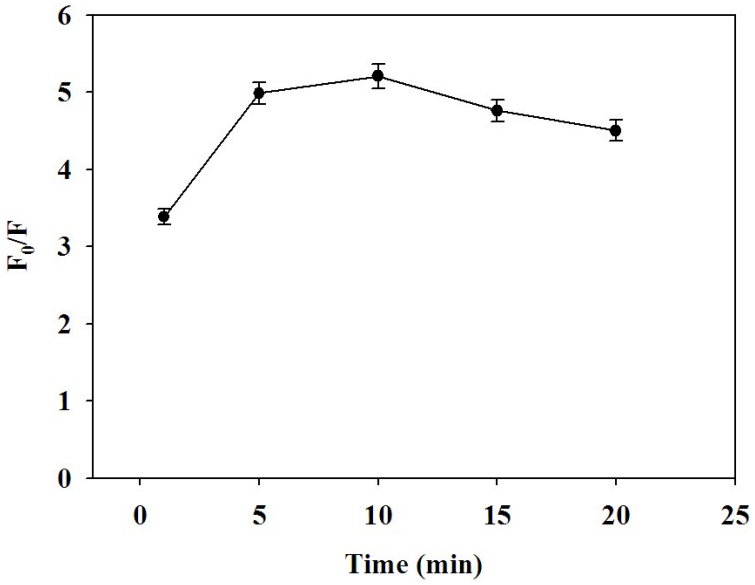

Fig. S3 Effect of CuNCs synthesis time on the fluorescence intensity of AT24-A6-hairpin CuNCs. Concentration: AT24-A6-hairpin DNA, 100 nM; S1 nuclease, 0.4 U/mL.

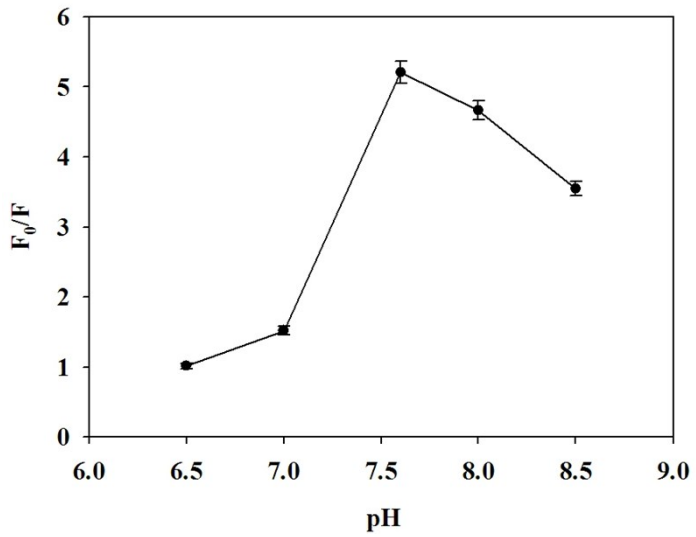

Fig. S4 Effect of pH on the fluorescence intensity of AT24-A6-hairpin CuNCs. Concentration: AT24-A6-hairpin DNA, 100 nM; S1 nuclease, 0.4 U/mL.

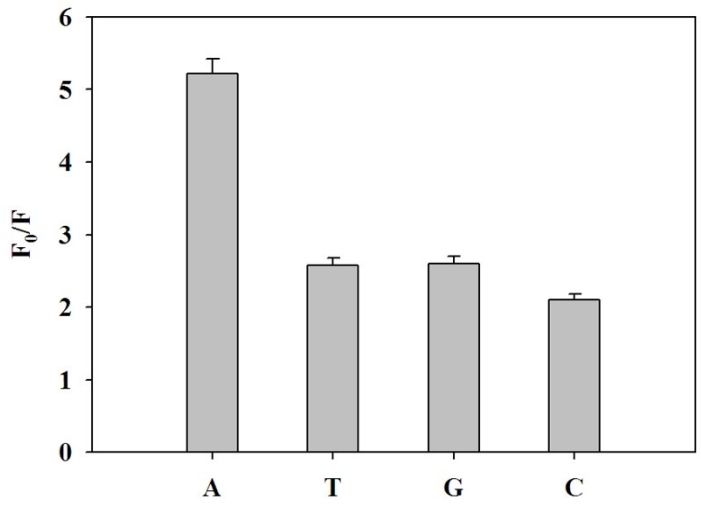

Fig. S5 Effect of different base sequence of hairpin loop on the sensitivity of the strategy. Concentration: AT24-X6-hairpin DNA (X=A, T, G, C), 100 nM; nuclease, 0.4 U/mL.

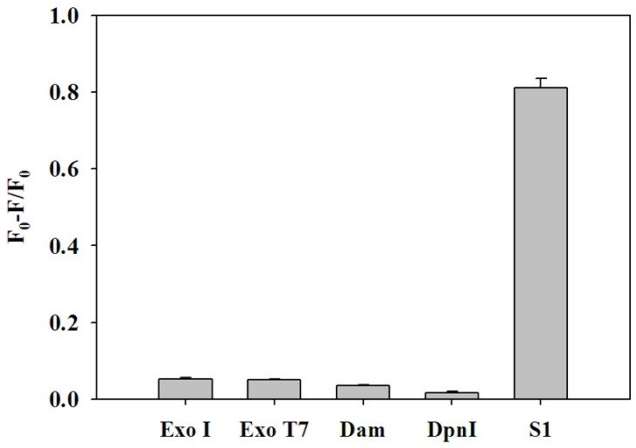

Fig. S6 Selectivity of the AT24-A6-hairpin CuNCs for S1 nuclease. Concentration: AT24-A6-hairpin DNA, 100 nM; nuclease, 0.4 U/mL.