Electronic Supplementary Material (ESI) for Analyst.

Supporting information

Fluorescent visual quantitation of cell-secreted sialoglycoconjugates by chemoselective recognition and hybridization chain reaction

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Table S1. Sequences of oligonucleotides used in this work.

DBCO-labeled primer	5'-CCAAACCGAAAGAACAATGGACCC-DBCO-3'
DBCO-unlabeled primer	5'-CCAAACCGAAAGAACAATGGACCC-3'
HCR hairpin H1	5'-GGGTCCATTGTTCTTTCGGTTTGGGTAGAGCCAAACCGAAAGAACAAT-Cy3-3'
HCR hairpin H2	5'-Cy3-CCAAACCGAAAGAACAATGGACCCATTGTTCTTTCGGTTTGGCTCTAC-3'

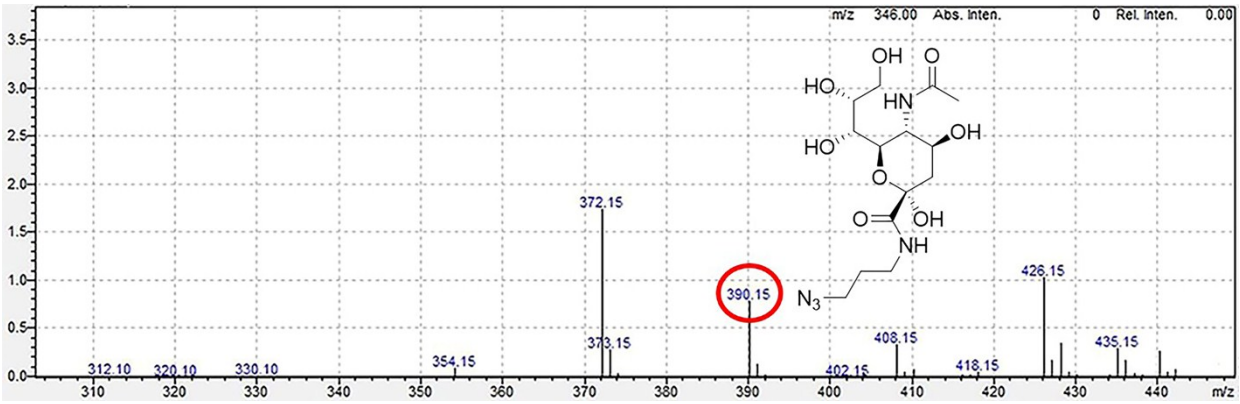

Figure S1. ESI mass spectrum of the synthetic azide-modified SA.

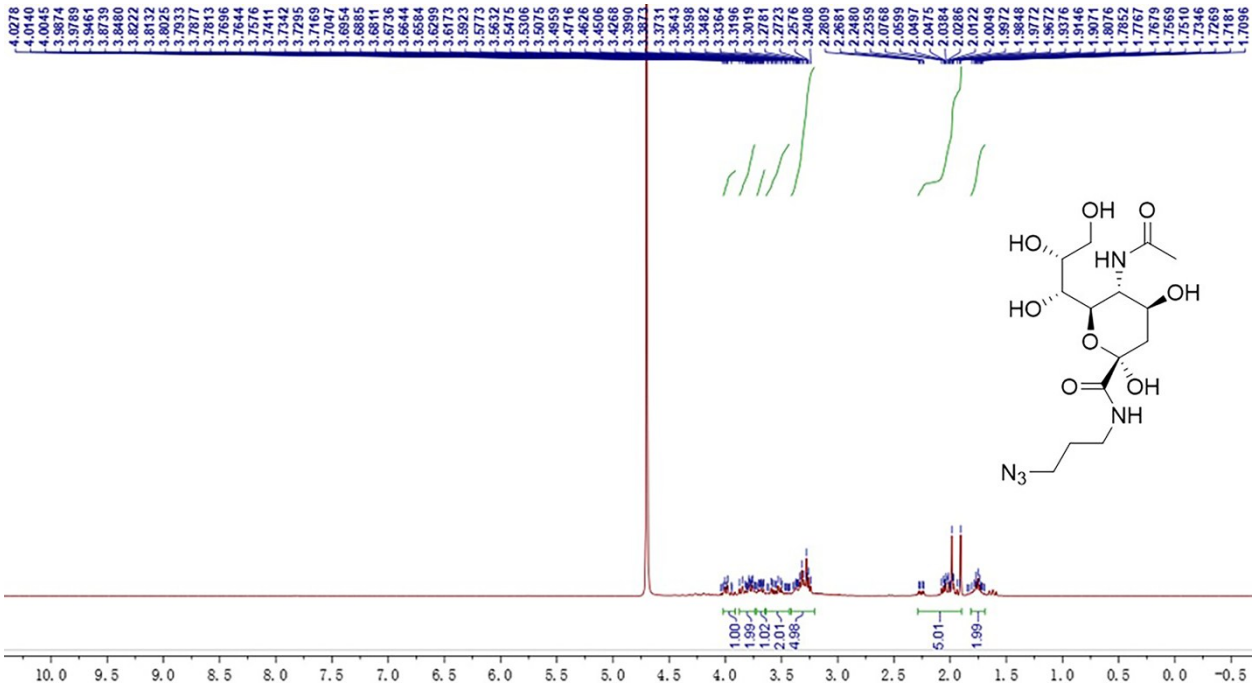

Figure S2. ^{1}H NMR spectrum of the synthetic azide-modified SA.

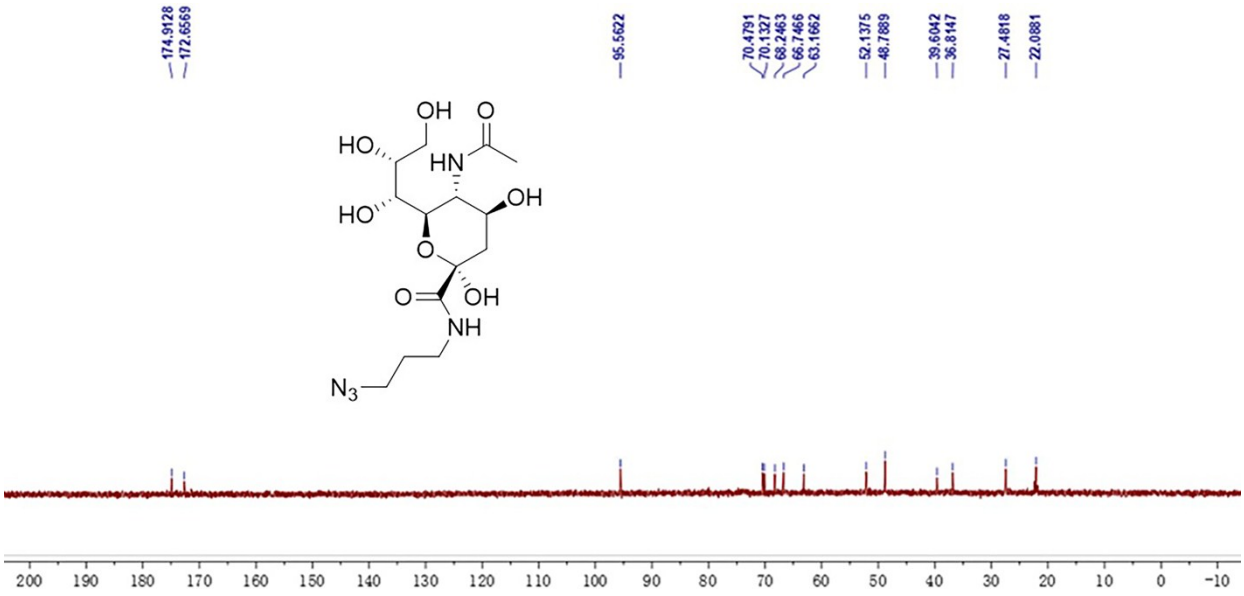

Figure S3. ^{13}C NMR spectrum of the synthetic azide-modified SA.

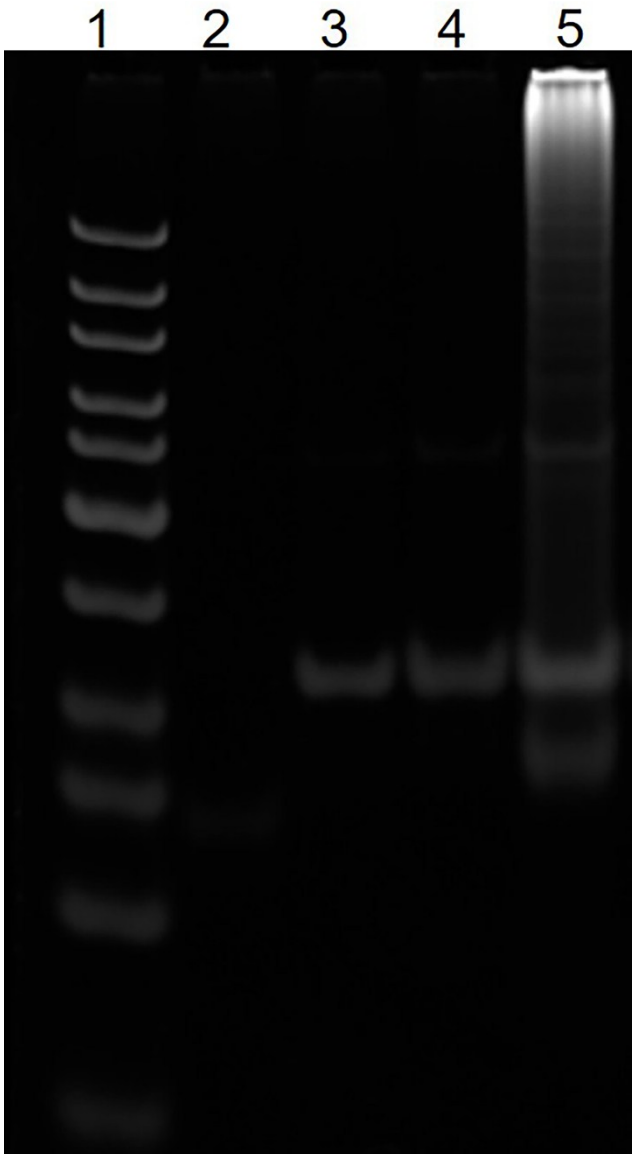

Figure S4. Gel electrophoresis image of (1) DNA ladder, (2) HCR primer, (3) annealed HCR hairpin H1, (4) annealed HCR hairpin H2 and (5) hybridization product of HCR primer, H1 and H2.

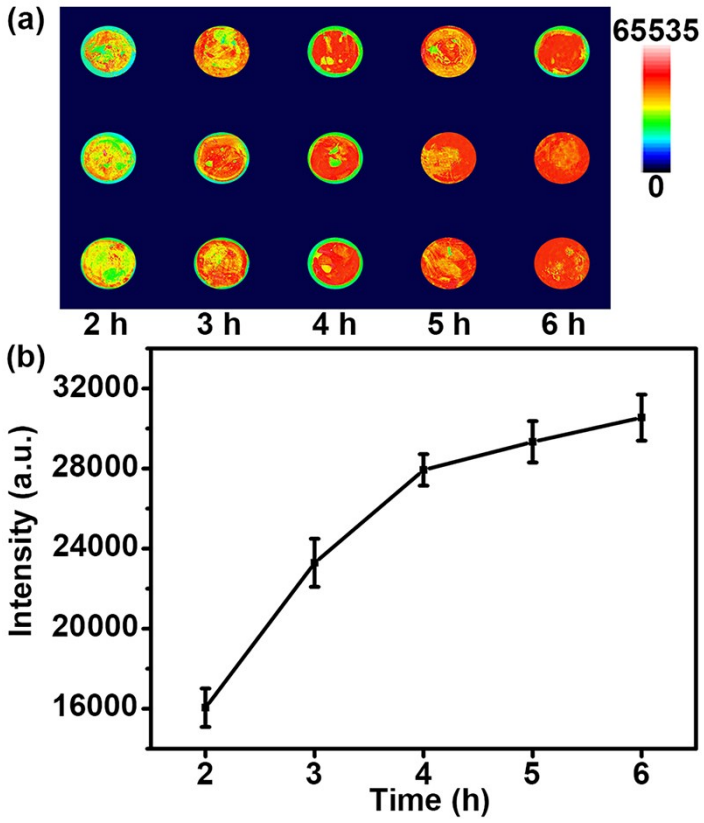

Figure S5. (a) Fluorescent image of metabolically labeled SiaGCs secreted from HeLa cells with different capture times, and (b) plot of fluorescent intensity *vs.* capture time.

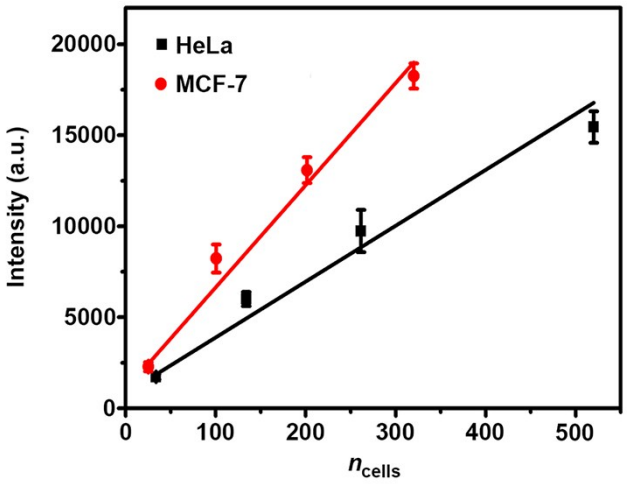

Figure S6. Plot of fluorescent intensity *vs.* numbers of HeLa and MCF-7 cells for secreting Ac_4ManNAz-labeled SiaGCs.

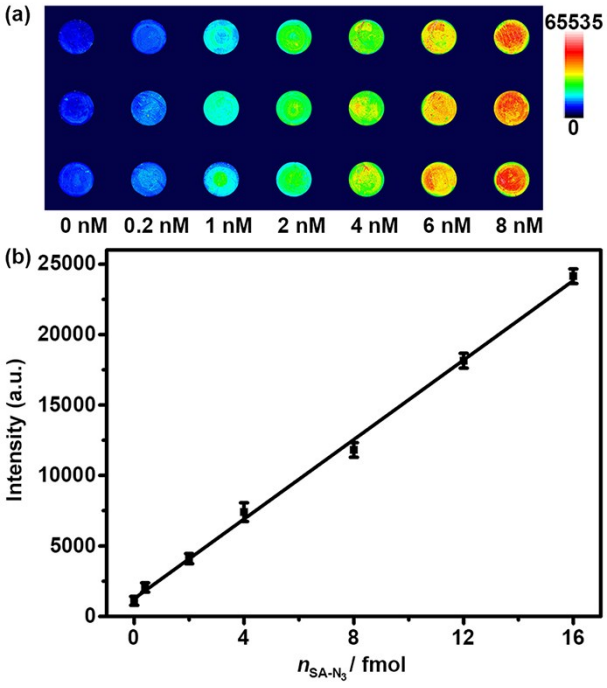

Figure S7. (a) Fluorescent image of synthetic azide-modified SA at different concentrations, and (b) plot of fluorescent intensity *vs.* amount of synthetic azide-modified SA.