

Supplementary Material

rGO-DNAzyme assisted fluorescence method for sensitive RNase A activity assay and natural compounds screening

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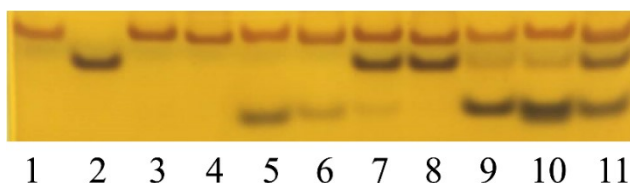


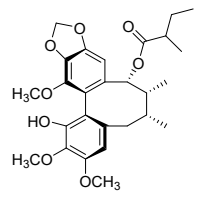
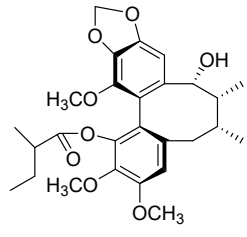
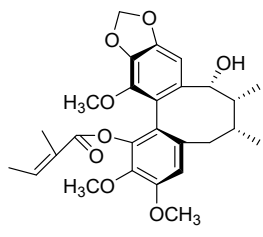
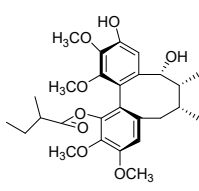
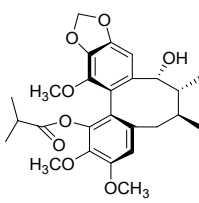
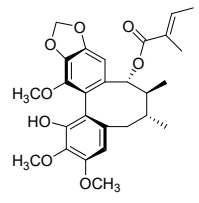
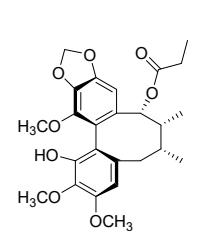
Fig. S1. Native PAGE gel (15%) for RNase A assay. Lane1:DNAzyme1; Lane2:P1; Lane3: S1; Lane4: S2; Lane5: S1+RNase A; Lane6: S2+RNase A; Lane7:S1+P1; Lane8: S2+P1.Lane 9: DNAzyme1+P1; Lane 10: S1+RNase A+P1; Lane11: S2+RNase A+P1.

[S1] = [S2] = [DNAzyme1] = [P1] = 100 nM, [RNase A] = 4 ng/ μ L. [rGO]= 7 μ g/mL.

Table S1. The sequences of oligonucleotide strands

Name	Sequences (5'-3')
DNAzyme1	CAT CTC TTC TCC GAG CCG GTC GAA ATA rU
P1	FAM-TAT rAGG AAG AGA TG
S1	CAT CTC TTC TCC GAG CCG GTC GAA ATA rUAA GAG ATG
S2	CAT CTC TTC TCC GAG CCG GTC GAA ATA rUGA AGA GATG

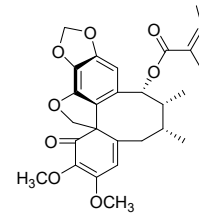
Table S2. Information of natural drugs

Code	Molecular Formula	Name	Structure
B1	$C_{27}H_{34}O_8$	Isovaleroybinankadsurin A	
B2	$C_{27}H_{34}O_8$	Kadsuralignan J	
B3	$C_{27}H_{32}O_8$	Kadsuralignan I	
B4	$C_{27}H_{36}O_8$	Kadsuralignan L	
B5	$C_{26}H_{32}O_8$	Heilaohulignan A	
B6	$C_{27}H_{32}O_8$	Heilaohulignan C	
B7	$C_{25}H_{30}O_8$	Longipedunin B	

B8

$C_{27}H_{30}O_8$

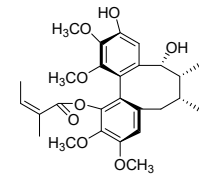
Schiarianrin E



B9

$C_{27}H_{34}O_8$

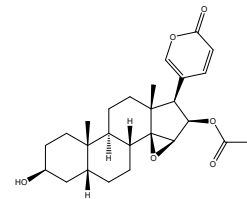
Schisantherin F



CS1

$C_{26}H_{34}O_6$

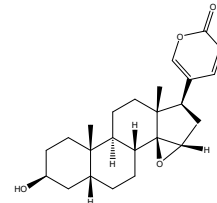
Cinobufagin



CS2

$C_{24}H_{32}O_4$

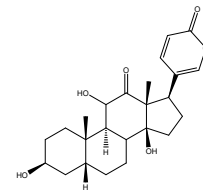
Recibufogenin



CS3

$C_{24}H_{32}O_6$

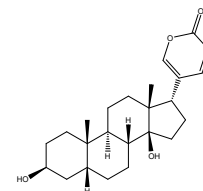
Arenobufagin



CS4

$C_{24}H_{34}O_4$

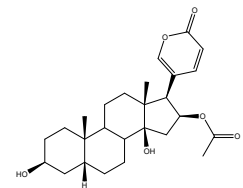
Bufalin



CS5

$C_{26}H_{36}O_6$

Bufotaline



CS6

$C_{24}H_{34}O_5$

Gamabufotalin

