Electronic Supplementary Information

A Study on the Telo21 G-quadruplex DNA specific binding ligand: Enhancing the molecular recognition ability via the amino group interactions

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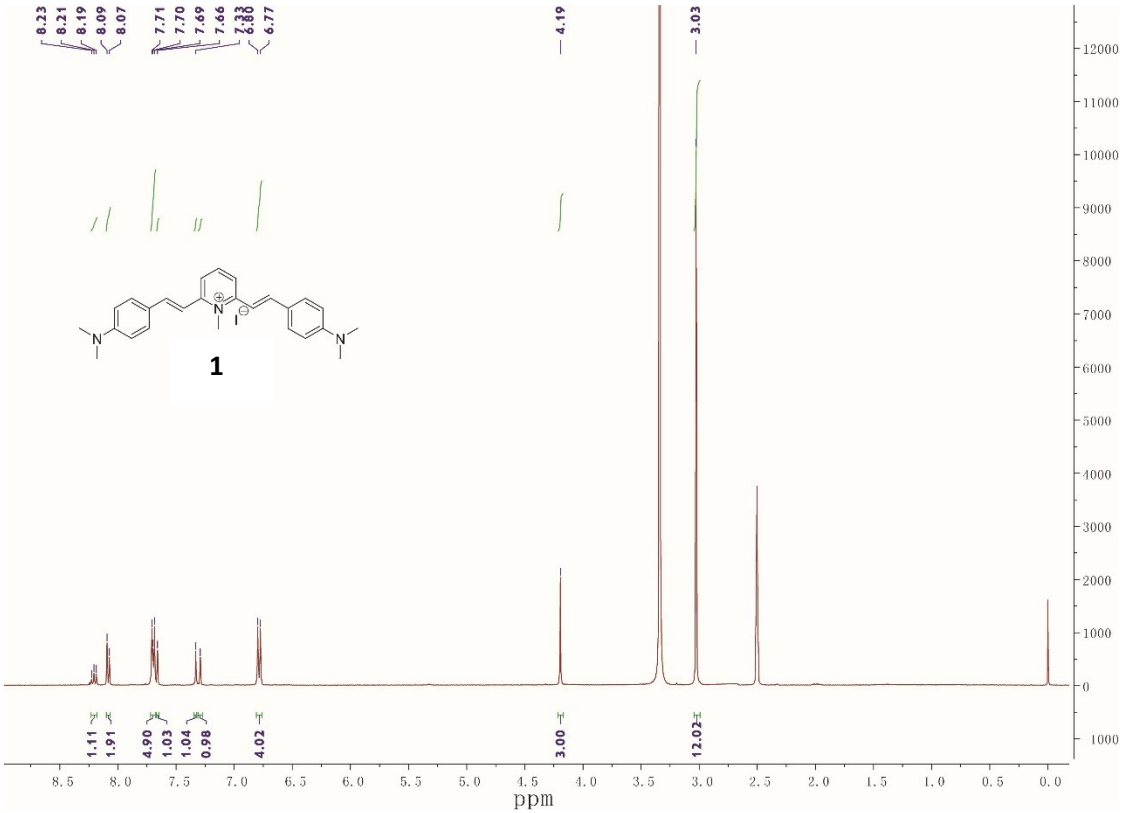
Table S1. Sequences of oligonucleotides used in the present study

Abbreviation	Sequence	Structure/origin
dA21	AAAAAAAAAAAAAAAAAAAAA	single-stranded
ds26	CAATCGGATCGAATTCGATCCGATTG	Duplex
telo21	GGGTTAGGGTTAGGGTTAGGG	Telomere G-quadruplex
RNA	16S- and 23S-Ribosomal from E. coli	Duplex
F21T	FAM-d(GGG[TTAGGG]$_3$)-TAMRA	Telomere G-quadruplex
F10T	FAM-dTATAGCTA-HEG-TATAGCTATAT-TAMRA	Duplex



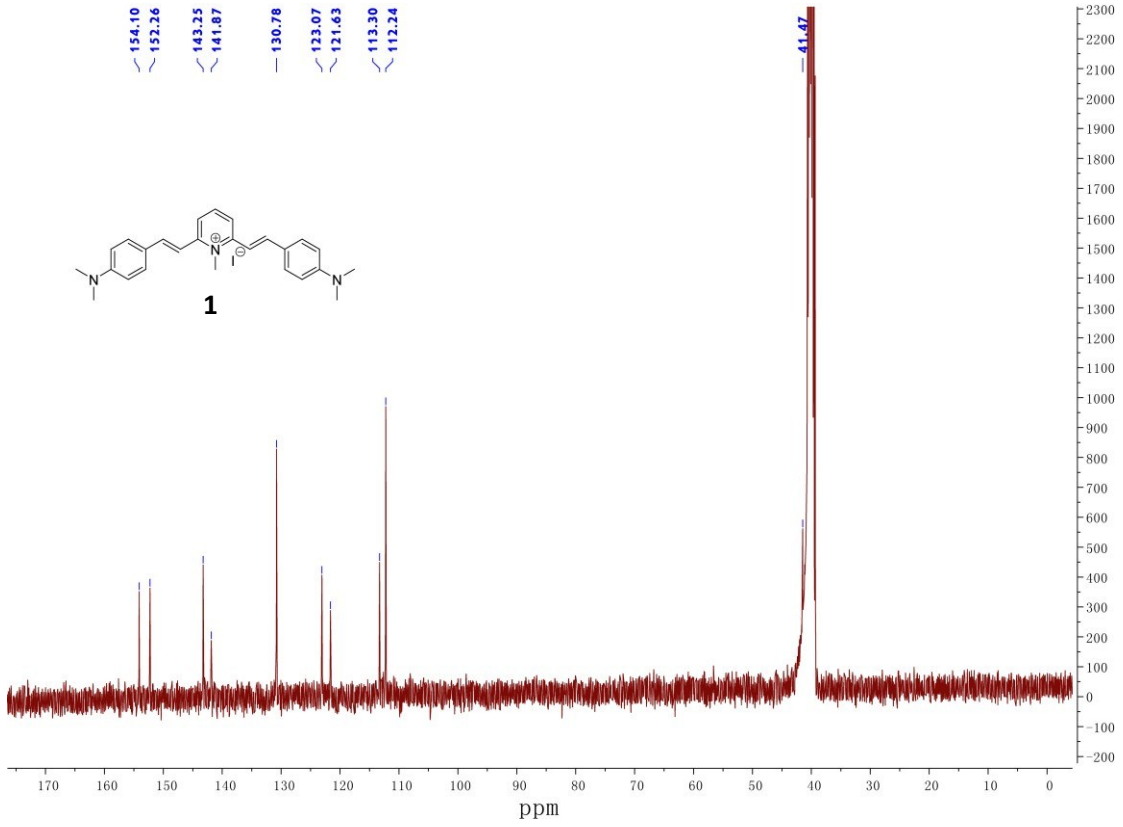


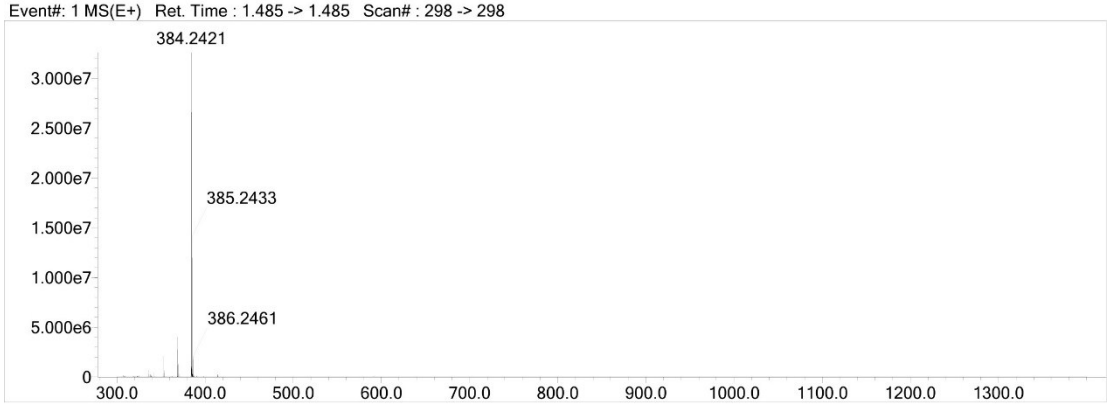
Figure. S1 ^{1}H NMR and ^{13}C NMR of compound **1**

Data File: F: 3b.lcd

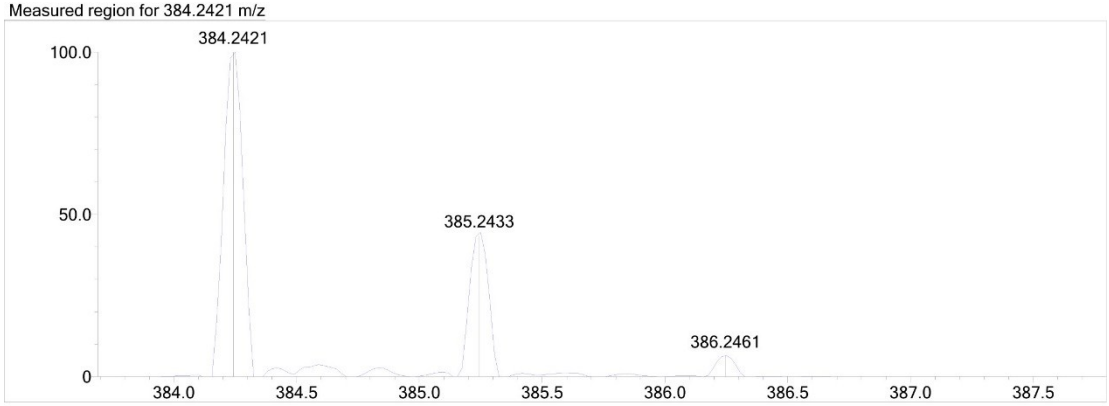
Elmt	Val.	Min	Max	Elmt	Val.	Min	Max	Elmt	Val.	Min	Max	Elmt	Val.	Min	Max	Use Adduct
H	1	0	50	O	2	0	0	S	2	0	3	I	3	0	1	H
C	4	0	50	F	1	0	0	Cl	1	0	0					Na
N	3	0	4	P	3	0	0	Br	1	0	0					

Error Margin (mDa): 5.0 DBE Range: -2.0 - 1000.0 Electron Ions: both
HC Ratio: unlimited Apply N Rule: yes Use MSn Info: yes
Max Isotopes: all Isotope RI (%): 1.00 Isotope Res: 10000
MSn Iso RI (%): 75.00 MSn Logic Mode: AND Max Results: 800

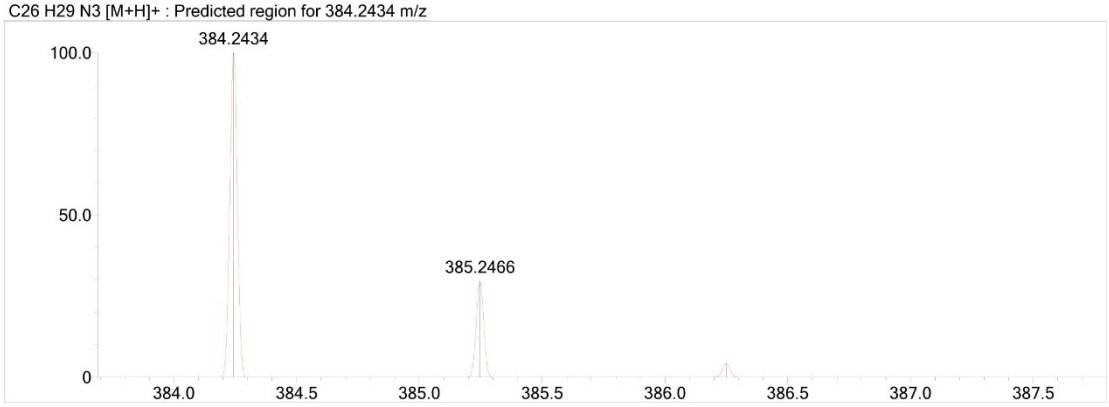
Event#: 1 MS(E+) Ret. Time : 1.485 -> 1.485 Scan# : 298 -> 298



Measured region for 384.2421 m/z



C26 H29 N3 [M+H]+ : Predicted region for 384.2434 m/z



Rank	Score	Formula (M)	Ion	Meas. m/z	Pred. m/z	Df. (mDa)	Df. (ppm)	Iso	DBE
2	46.83	C26 H29 N3	[M+H]+	384.2421	384.2434	-1.3	-3.38	49.80	14.0

Figure. S2 HR-MS spectra of compound **1**