

Supporting Information

Towards Profiling of the G-Quadruplex Targeting Drugs in the Living Human Cells Using NMR Spectroscopy

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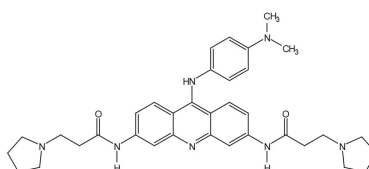
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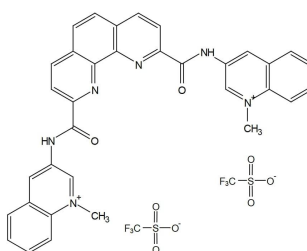
Table S1. List of DNA oligonucleotides used.

Name	Sequence			
Tel21T	GGGTTA	GGGTTA	GGGTTT	GGG
Bcl2	GGGCAG	GAGGGC	TCTGGG	TGGGT
KRAS	AGGGCG	GTGTGG	GAATAG	GGAA

BRACO19



PhenDC3



NMM

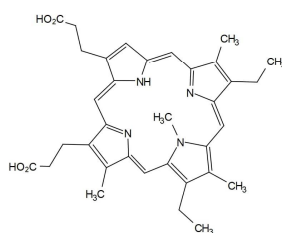


Figure S1. G-quadruplex-binding ligands used in the study.

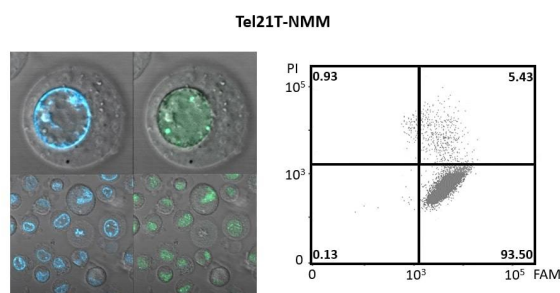


Figure S2. (Left) Confocal microscopy images of RPE cells transfected with Tel21T-NMM. The green color indicates the localization of (FAM)-DNA/(FAM)-DNA-ligand complex. The blue color corresponds to a cell nucleus stained by Hoechst 33342. (Right) Double staining (PI/FAM) FCM analysis of transfected RPE cells with the Tel21T-NMM complex. Percentages (the numbers in the FCM plots) of viable non-transfected cells, viable DNA/DNA-ligand containing cells, non-transfected dead/compromised cells, and transfected dead/compromised cells containing DNA/DNA-ligand are indicated in left-bottom, right-bottom, left-top, and right-top quadrants, respectively.

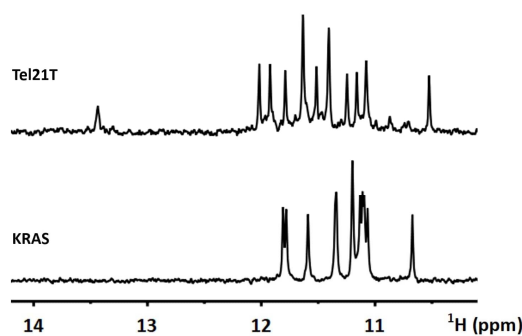


Figure S3. Imino regions of 1D ¹H NMR spectra of Tel21T and KRAS acquired in K⁺ buffer (70 mM KCl, 20 mM KPO₄, pH = 7.0).

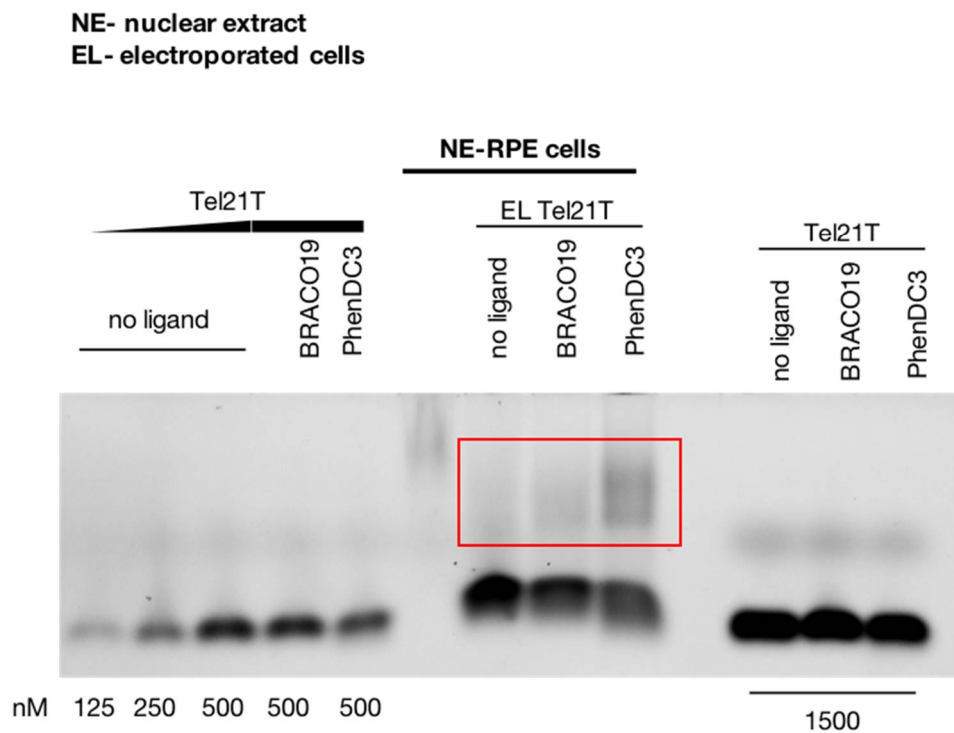


Figure S4. FAM-Tel21T \pm ligands in the nuclear extracts from electroporated RPE cells separated on 0.8% agarose gel/1x TBE. Red box highlights putative complexes between Tel21T and nuclear proteins.