

Article

Comparison of Chemotherapeutic Activities of Rhodamine-Based GUMBOS and nanoGUMBOS

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Table S1. Results from ESI mass spectrometric characterization of GUMBOS.

Compound	Positive Mode		Negative Mode	
	Theoretical (<i>m/z</i>)	Actual (<i>m/z</i>)	Theoretical (<i>m/z</i>)	Actual (<i>m/z</i>)
[R123][BETI]	345.4	345.6	381.1	381.4
[R123][TPB]	345.4	345.5	319.3	319.2
[SNAFR-5][BETI]	458.3	458.2	381.1	381.2
[SNAFR-5][TPB]	458.3	458.2	319.3	319.1
[RB][TPB]	444.2	444.4	319.3	319.5
[RB][BETI]	444.2	44.43	381.1	381.3
[R110][TPB]	331.8	331.9	319.3	319.4
[R110][BETI]	331.8	331.7	381.1	381.4

Table S2. Relative hydrophobicity of R123 and SNAFR-5 based GUMBOS.

Compound	Log <i>K_{ow}</i>
[R123][BETI]	1.1
[R123][TPB]	0.8
[R123][Cl]	0.25
[SNAFR-5][BETI]	1.4
[SNAFR-5][TPB]	1.2
[SNAFR-5]	0.28
[RB][TPB]	1.6
[RB][BETI]	1.25
[RB][ClI]	1.1
[R110][TPB]	0.30
[R110][BETI]	0.32



Table S3. Water solubility of RB and R110 GUMBOS.

Compound	Solubility (mol/L)	Dissociation Constant (mol ² /L ²)
[RB][TPB]	1.7×10^{-5}	1.7×10^{-10}
[RB][BETI]	1.3×10^{-5}	2.9×10^{-10}
[RB][ClI]	3.1×10^{-2}	9.8×10^{-4}
[R110][TPB]	4.1×10^{-5}	7.8×10^{-10}
[R110][BETI]	2.8×10^{-5}	1.7×10^{-10}
[R110][ClI]	$>7.0 \times 10^{-4}$	$>4.6 \times 10^{-7}$

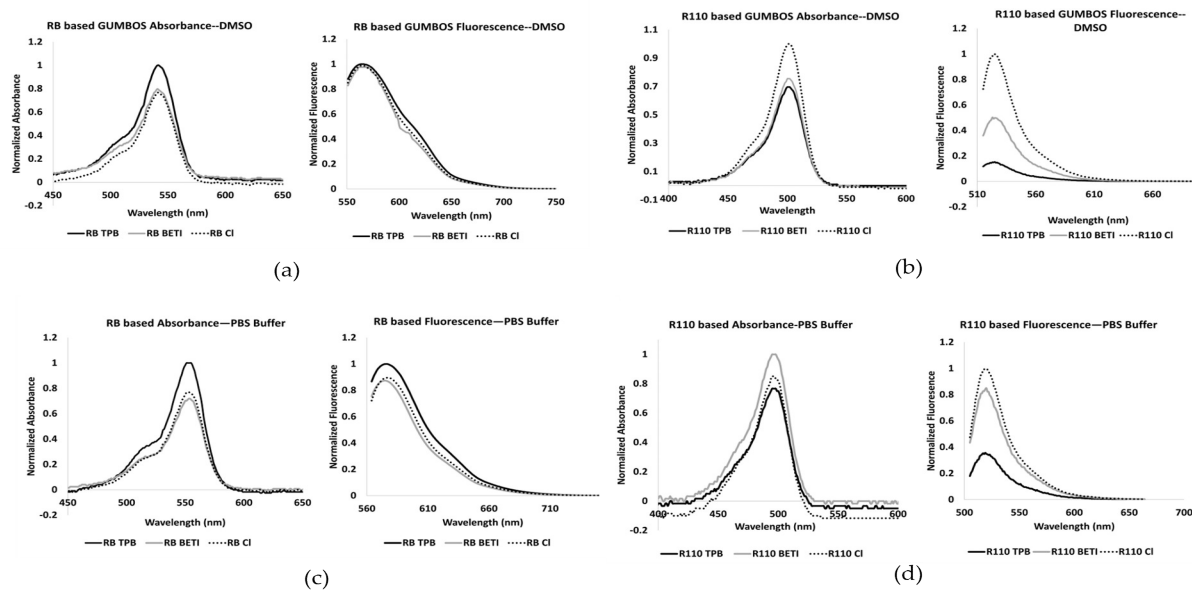


Figure S1. (a) Absorbance and Fluorescence of RB GUMBOS in DMSO; (b) Absorbance and Fluorescence of R110 GUMBOS in DMSO; (c) Absorbance and Fluorescence of RB GUMBOS in PBS Buffer; (d) Absorbance and Fluorescence of R110 GUMBOS in PBS Buffer.