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## Electronic Supplementary Information (ESI) for New Journal of Chemistry

## Nicotinic Acid-Based Cationic Vectors for Efficient Gene Delivery in to Glioblastoma Cells

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## Supplementary information

## Table of Contents:

1)	<sup>1</sup> H-NMR,	<sup>13</sup> C-NMR	and	ESI-MS	(HRMS)	spectra	of	cationic	lipids	including	the
int	ermediates.							•••••		(Fig. S1-S	21)
2)	HPLC chroi	matogram o	f NG'	T and NG	C lipids		•••••		(Fig.	S22 and S	23)
3) FACS analysis of eGFP transfection of NGT and NGC at 2:1 mole ratio in HEK-293, U87,											
CA	L-27, and C	CT-26 cell li	ines							(Fig. S	524)



Figure S1: <sup>1</sup>H NMR Spectrum of intermediate 1A, Scheme A



Figure S2: <sup>13</sup>C NMR Spectrum of intermediate 1A, Scheme A



Figure S3: ESI-HRMS Spectrum of intermediate 1A, Scheme A



Figure S4: <sup>1</sup>H NMR Spectrum of intermediate 2A, Scheme A



Figure S5: <sup>13</sup>C NMR Spectrum of intermediate 2A, Scheme A



Figure S6: ESI-HRMS Spectrum of intermediate 2A, Scheme A



Figure S7: <sup>1</sup>H NMR Spectrum of NGT (Lp-I), Scheme A



Figure S8: <sup>13</sup>C NMR Spectrum of NGT (Lp-I), Scheme A



Figure S9: ESI-HRMS Spectrum of NGT (Lp-I), Scheme A



Figure S10: <sup>1</sup>H NMR Spectrum of compound 1B, Scheme B



Figure S11: <sup>13</sup>C NMR Spectrum of compound 1B, Scheme B



Figure S12: ESI-HRMS Spectrum of compound 1B, Scheme B



Figure S13: <sup>1</sup>H NMR Spectrum of intermediate 2B, Scheme B



Figure S14: <sup>13</sup>C NMR Spectrum of intermediate 2B, Scheme B



Figure S15: ESI-HRMS Spectrum of intermediate 2B, Scheme B



Figure S16: <sup>1</sup>H NMR Spectrum of intermediate 3B, Scheme B



Figure S17: <sup>13</sup>C NMR Spectrum of intermediate 3B, Scheme B



Figure S18: ESI-HRMS Spectrum of intermediate 3B, Scheme B



Figure S19: <sup>1</sup>H NMR Spectrum of NGC Lp-II, Scheme B



Figure S20: <sup>13</sup>C NMR Spectrum of NGC Lp-II, Scheme B



Figure S21: ESI-HRMS Spectrum of NGC Lp-II, Scheme B



Figure S22: HPLC Chromatogram of NGT Lp-I



Figure S23: HPLC Chromatogram of NGC Lp-II





**Figure S24:** FACS analysis of eGFP transfection of NGT and NGC at 2:1 mole ratio in HEK-293, U87, CAL-27, and CT-26 cell lines; Non treated as control.

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FITC-A

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FITC-A

FITC-A

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