

Supplementary Materials:

Complexes of Pro-Apoptotic siRNAs and Carbosilane Dendrimers: Formation and Effect on Cancer Cells

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Table S1. Sequences of the oligonucleotides used.

Name	Sequence	Molecular weight	
		Calcd, [M+H] ⁺	Found, ¹ m/z
Bcl-2 S	5'-r(GCUGCACCUGACGCCCCUUC)dTdT-3'	6559.0	6559.5
Bcl-2 AS	5'-r(GAAGGGCGUCAGGUGCAGC)dTdT-3'	6805.2	6806.1
Bcl-xL S	5'-r(CAGGGACAGCAUAUCAGAG)dTdT-3'	6572.0	6572.4
Bcl-xL AS	5'-r(CUCUGAUUAUGCUGUCCUG)dTdT-3'	6712.2	6712.6
Mcl-1 S	5'-r(GGACUUUUUAUACCUGUUAU)dTdT-3'	6757.2	6757.5
Mcl-1 AS	5'-r(AUAACAGGUUAAAAGUCC)dTdG-3'	6562.0	6562.4
Scr1	5'-r(ACUCUAGCGGCACCAUCGUGCC)dTdT-3'	7562.7	7563.2
Scr2	5'-r(GGCACGAUGGUGCCGCUAGAGU)dTdT-3'	7722.8	7723.2

¹ MALDI TOF mass spectrometry.

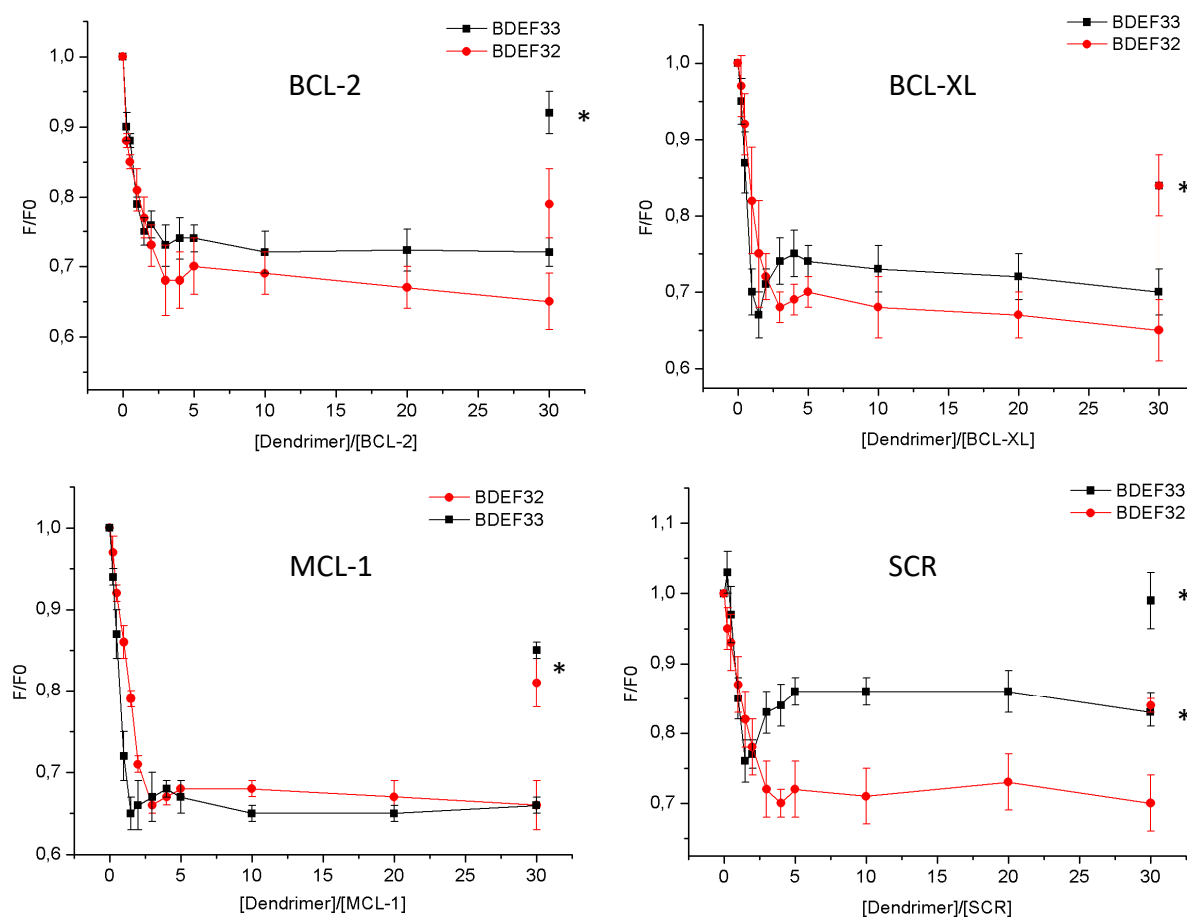


Figure S1. Changing of the normalized fluorescence intensity (at 595 nm) of ethidium bromide upon the titration of siRNA ($[siRNA] = 0.3 \mu M$, $[EB] = 3 \mu M$) by carboxilane dendrimers (* after heparin treatment). Conditions: 1×PBS (137 mM NaCl, 2.7 mM KCl, 10 mM phosphate buffer, pH 7.4), 25 °C.

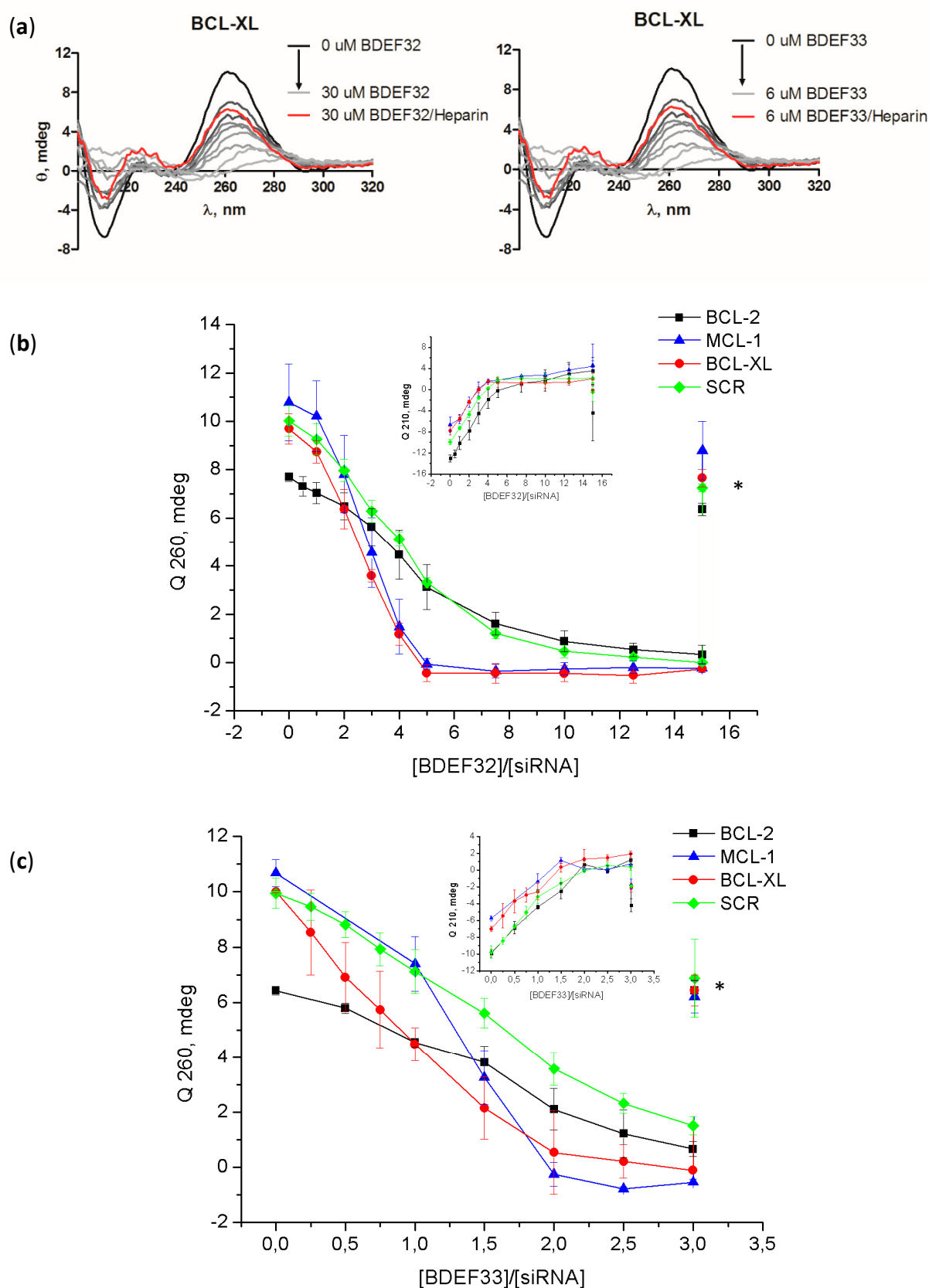


Figure S2. CD spectroscopy curves of siRNA Bcl-xL ([siRNA Bcl-xL] = 2 μ M) in the presence of the carboxilane dendrimers of BDEF32 and BDEF33 (a); changes of ellipticity (at 260 nm) of dendriplexes formed by siRNAs and dendrimers BDEF32 (b) and BDEF33 (c) (* after heparin treatment). Conditions: 1 $\times$ PBS (137 mM NaCl, 2.7 mM KCl, 10 mM phosphate buffer, pH 7.4), 25 $^{\circ}$ C.

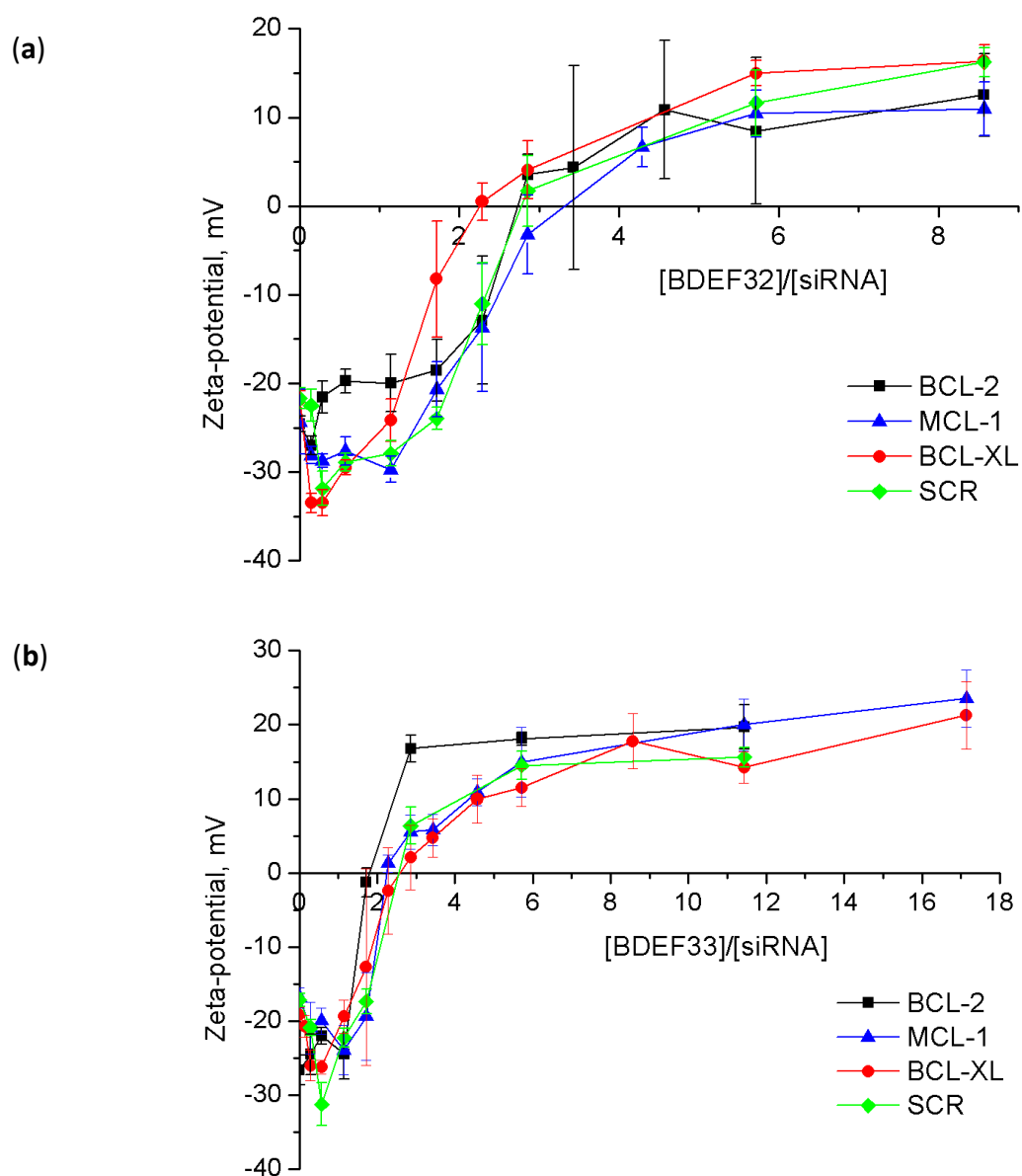


Figure S3. Zeta-potential profiles of the dendriplexes ([siRNA] = 0.5 μ M) as a function of the concentration of carboxilane dendrimers of the second (a) and third (b) generations. Conditions: 1 $\times$ PBS (137 mM NaCl, 2.7 mM KCl, 10 mM phosphate buffer, pH 7.4), 25 $^{\circ}$ C.