

Figure S1

NMR Spectra:

CR3-Man-C6

¹H-NMR: (400 MHz, CD₃OD, TMS) (ppm): δ = 4.41-4.33 (br, NH₂-C(=O)-CH-NH-C(=O)-CH-NH-C(=O)-CH-NH-C(=O)-CH-CH₂-), 4.11 (t, CH₂-CH₂-O), 3.55 (t, CH₂-CH₂-OH), 3.22 (br, NH₂-C(=NH)-NH-CH₂-), OH- (CH₂)₄-CH₂-N-), 3.04 (t, CH₂-CH₂-N-), 2.82 (dd, -CH₂-S-CH₂), 2.48 (br, -N-CH₂-CH₂-C(=O)-O), 1.90 (m, NH₂-C(=NH)-NH-(CH₂)₂-CH₂-CH-), 1.73 (br, -O-CH₂-CH₂-CH₂-CH₂-O), 1.69 (m, NH₂-C(=NH)-NH-CH₂-CH₂-CH₂-), 1.56 (br, -CH₂-CH₂-CH₂-CH₂-OH), 1.39 (br, -N-(CH₂)₂-CH₂-(CH₂)₂-OH), 0.88 (t, CH₂-CH₂-CH₃).

CK3-Man-C6

¹H-NMR: (400 MHz, CD₃OD, TMS) (ppm): δ = 4.38-4.29 (br, NH₂-(CH₂)₄-CH-), 4.13 (t, CH₂-CH₂-O-), 3.73 (br, NH₂-CH-CH₂-S-), 3.55 (t, CH₂-CH₂-OH), 2.94 (br, CH₂-CH₂-N-, NH₂-CH₂-(CH₂)₃-CH-), 2.81 (dd, -CH₂-S-CH₂), 2.57 (br, -N-CH₂-CH₂-C(=O)-O), 1.85 (m, NH₂-(CH₂)₃-CH₂-CH-), 1.74 (br, -O-CH₂-CH₂-CH₂-CH₂-O), 1.68 (m, NH₂-CH₂-CH₂-(CH₂)₂-CH-), 1.54 (br, -CH₂-CH₂-CH₂-CH₂-OH), 1.37 (br, -N-(CH₂)₂-CH₂-(CH₂)₂-OH), 0.88 (t, CH₂-CH₂-CH₃).

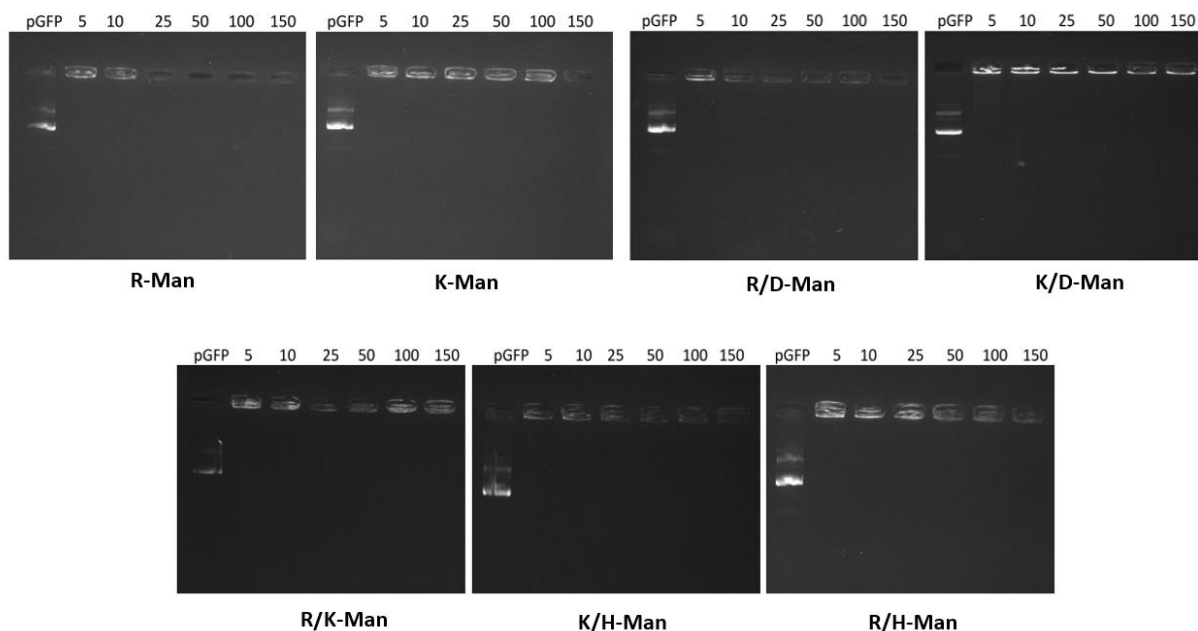


Figure S2. Gel retardation assays of polyplexes formulated with distinct mixtures of different OM-C6-PBAEs. Complexes were prepared as described combining cationic and anionic polymers at the established ratios and electrophoresed at 120 V for one hour. Naked pGFP was used as control group in order to evaluate the maximum DNA migration.