

SUPPLEMENTARY INFORMATION

Table S1: Fraction of live NIH 3T3 cells after incubation with the different C₆₀ vectors as a function of derivatized fullerene concentration after 2 hour C₆₀-incubation times in serum-free medium. (mean ± standard deviation for n = 4).

C ₆₀ Vector	Fraction of live cells (%) at various concentrations (µg/ µl)				
	0.1 ug/ml	1 ug/ml	2 ug/ml	4 ug/ml	10 ug/ml
IV	1.08 ± 0.13	1.09 ± 0.13	1.03 ± 0.12	0.99 ± 0.10	0.80 ± 0.05
III	1.03 ± 0.23	1.04 ± 0.13	1.04 ± 0.10	1.07 ± 0.13	0.70 ± 0.11
II	0.90 ± 0.09	0.69 ± 0.03	1.11 ± 0.06	1.06 ± 0.12	1.03 ± 0.09
I	0.63 ± 0.09	0.69 ± 0.03	0.72 ± 0.11	0.63 ± 0.04	0.55 ± 0.08
V	0.98 ± 0.10	1.16 ± 0.06	0.91 ± 0.15	0.79 ± 0.12	0.72 ± 0.09
VI	0.95 ± 0.06	0.92 ± 0.13	0.85 ± 0.11	0.70 ± 0.09	0.75 ± 0.08

Table S2: Fraction of live NIH 3T3 cells after incubation with the different C₆₀ vectors as a function of derivatized fullerene concentration after 8 hour C₆₀-incubation times in serum-free medium. (mean ± standard deviation for n = 4).

C ₆₀ Vector	Fraction of live cells (%) at various concentrations (µg/ µl)				
	0.1 ug/ml	1 ug/ml	2 ug/ml	4 ug/ml	10 ug/ml
IV	0.96 ± 0.04	0.98 ± 0.03	0.92 ± 0.05	0.97 ± 0.04	0.89 ± 0.10
III	0.96 ± 0.05	0.98 ± 0.03	0.97 ± 0.05	1.02 ± 0.02	0.86 ± 0.11
II	0.82 ± 0.03	0.88 ± 0.14	0.68 ± 0.04	0.72 ± 0.01	0.77 ± 0.18
I	0.52 ± 0.13	0.56 ± 0.03	0.59 ± 0.08	0.70 ± 0.14	0.51 ± 0.04
V	1.04 ± 0.04	0.97 ± 0.07	0.95 ± 0.13	0.84 ± 0.08	0.69 ± 0.12
VI	1.01 ± 0.1	0.95 ± 0.10	0.81 ± 0.15	0.69 ± 0.06	0.65 ± 0.08

Table S3: Fraction of live NIH 3T3 cells after incubation with the different C₆₀ vectors as a function of derivatized fullerene concentration after 24 hour C₆₀-incubation times in serum-free medium (mean ± standard deviation for n = 4).

C ₆₀ Vector	Fraction of live cells (%) at various concentrations (µg/ µl)				
	0.1 ug/ml	1 ug/ml	2 ug/ml	4 ug/ml	10 ug/ml
IV	0.98 ± 0.07	0.90 ± 0.16	0.92 ± 0.07	0.84 ± 0.12	0.68 ± 0.15
III	0.84 ± 0.13	0.93 ± 0.11	0.71 ± 0.16	0.65 ± 0.13	0.57 ± 0.09
II	0.79 ± 0.07	0.91 ± 0.11	0.69 ± 0.08	0.43 ± 0.12	0.34 ± 0.13
I	0.60 ± 0.11	0.62 ± 0.10	0.54 ± 0.11	0.40 ± 0.02	0.21 ± 0.05
V	0.85 ± 0.14	0.94 ± 0.07	0.77 ± 0.11	0.57 ± 0.09	0.49 ± 0.10
VI	0.93 ± 0.07	0.86 ± 0.03	0.67 ± 0.13	0.58 ± 0.09	0.40 ± 0.07

Table S4: Fraction of live NIH 3T3 cells after incubation with the different C₆₀/DNA transfection mixtures as a function of C₆₀ compound concentration and varying R value after 2 hour post-transfection incubation time in serum-free medium (mean ± standard deviation for n = 4).

C ₆₀ Vector	Fraction of live cells (%) at various R Values				
	R = 0.42	R = 4.2	R = 8.4	R = 16.8	R = 42
IV	0.99 ± 0.07	0.93 ± 0.06	0.80 ± 0.12	0.79 ± 0.03	0.75 ± 0.05
III	0.92 ± 0.03	0.96 ± 0.11	0.84 ± 0.12	0.87 ± 0.05	0.81 ± 0.10
II	0.70 ± 0.15	0.59 ± 0.10	0.54 ± 0.09	0.27 ± 0.07	0.19 ± 0.06
I	0.59 ± 0.04	0.61 ± 0.06	0.42 ± 0.14	0.30 ± 0.09	0.25 ± 0.12
V	0.96 ± 0.11	1.07 ± 0.07	0.93 ± 0.13	0.81 ± 0.11	0.74 ± 0.08
VI	0.95 ± 0.08	0.91 ± 0.12	0.82 ± 0.10	0.74 ± 0.10	0.77 ± 0.07

Table S5: Fraction of live NIH 3T3 cells after incubation with the different C₆₀/DNA transfection mixtures as a function of C₆₀ compound concentration and varying R value after 8 hour post-transfection incubation time in serum-free medium (mean ± standard deviation for n = 4).

C₆₀ Vector	Fraction of live cells (%) at various R Values				
	R = 0.42	R = 4.2	R = 8.4	R = 16.8	R = 42
IV	0.92 ± 0.04	0.82 ± 0.03	0.69 ± 0.05	0.63 ± 0.04	0.59 ± 0.07
III	0.76 ± 0.08	0.78 ± 0.03	0.67 ± 0.05	0.62 ± 0.02	0.56 ± 0.04
II	0.55 ± 0.06	0.48 ± 0.04	0.23 ± 0.09	0.21 ± 0.08	0.16 ± 0.08
I	0.42 ± 0.11	0.51 ± 0.05	0.29 ± 0.09	0.20 ± 0.04	0.22 ± 0.08
V	0.96 ± 0.03	0.91 ± 0.06	0.95 ± 0.08	0.70 ± 0.05	0.71 ± 0.05
VI	0.98 ± 0.07	0.93 ± 0.06	0.75 ± 0.03	0.74 ± 0.07	0.4 ± 0.04

Table S6: Fraction of live NIH 3T3 cells after incubation with the different C₆₀/DNA transfection mixtures as a function of C₆₀ compound concentration and varying R value after 24 hour post-transfection incubation time in serum-free medium (mean ± standard deviation for n = 4).

C₆₀ Vector	Fraction of live cells (%) at various R Values				
	R = 0.42	R = 4.2	R = 8.4	R = 16.8	R = 42
IV	0.78 ± 0.05	0.70 ± 0.04	0.52 ± 0.09	0.34 ± 0.05	0.11 ± 0.05
III	0.74 ± 0.04	0.71 ± 0.08	0.46 ± 0.06	0.29 ± 0.08	0.17 ± 0.05
II	0.29 ± 0.04	0.21 ± 0.09	0.23 ± 0.07	0.10 ± 0.06	0.11 ± 0.07
I	0.34 ± 0.04	0.22 ± 0.04	0.14 ± 0.07	0.11 ± 0.05	0.13 ± 0.08
V	0.80 ± 0.10	0.74 ± 0.06	0.68 ± 0.05	0.67 ± 0.06	0.59 ± 0.07
VI	0.81 ± 0.04	0.75 ± 0.08	0.57 ± 0.10	0.48 ± 0.08	0.2 ± 0.06