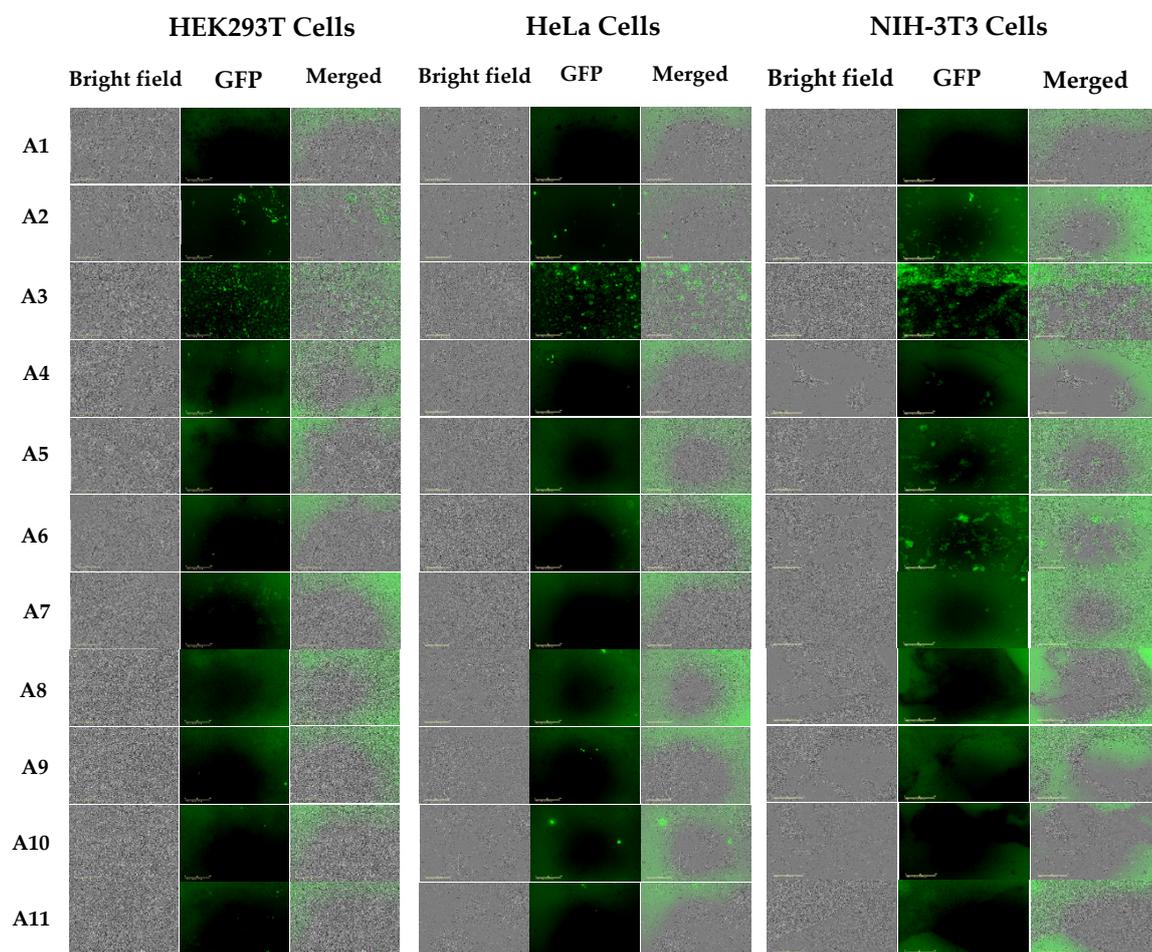
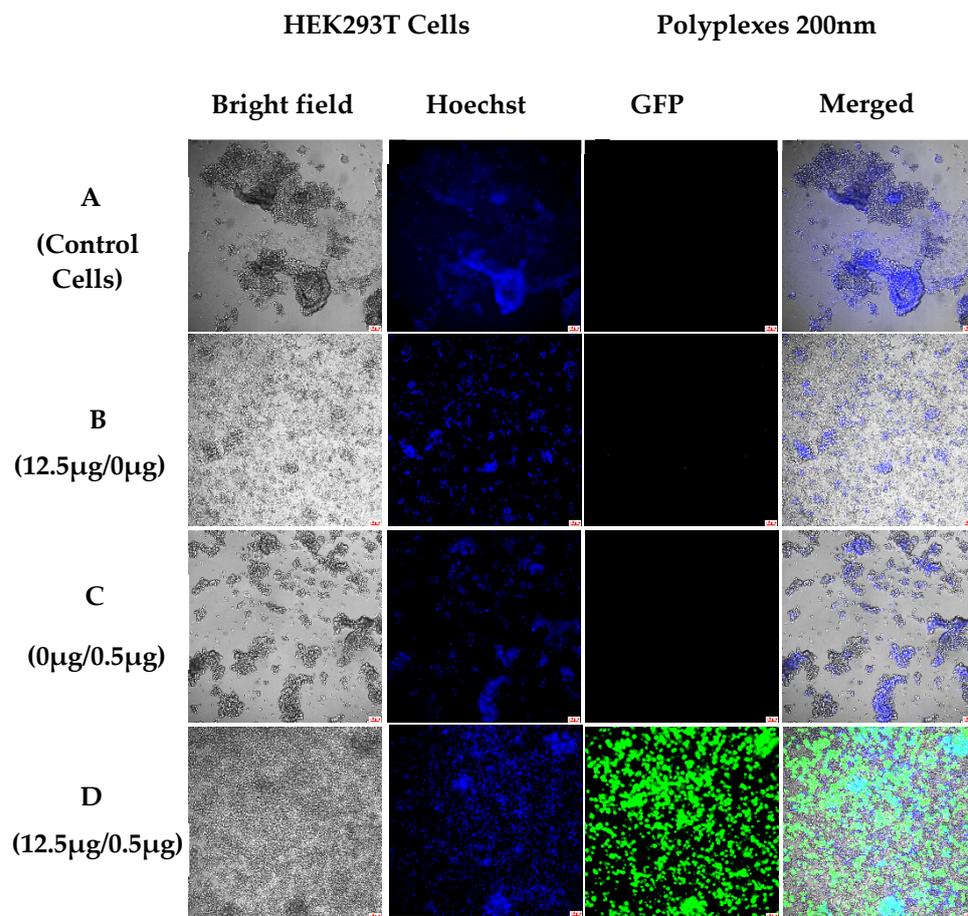


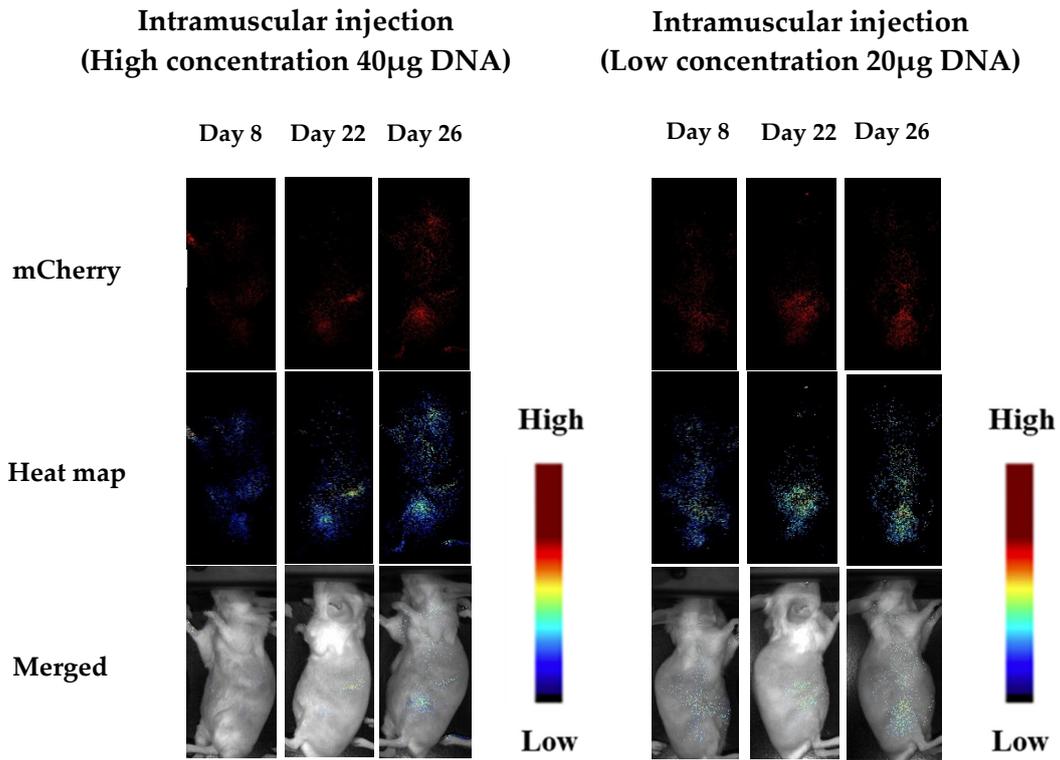
**Figure S1.** Fluorescence microscopic images (10X) of 50 nm polyplexes with HEK293T cells after 6 days incubation. (Scale bar for all the pictures - 100µm). (A) Control cells, (B) 12.5 µg NHG's (200nm)/0.5 µg GFP, (C) 5 µg NHG's (50nm)/0.5 µg GFP, (D) 10 µg NHG's (50nm)/0.5 µg GFP and (E) 12.5 µg NHG's (50nm)/ 0.5 µg GFP.



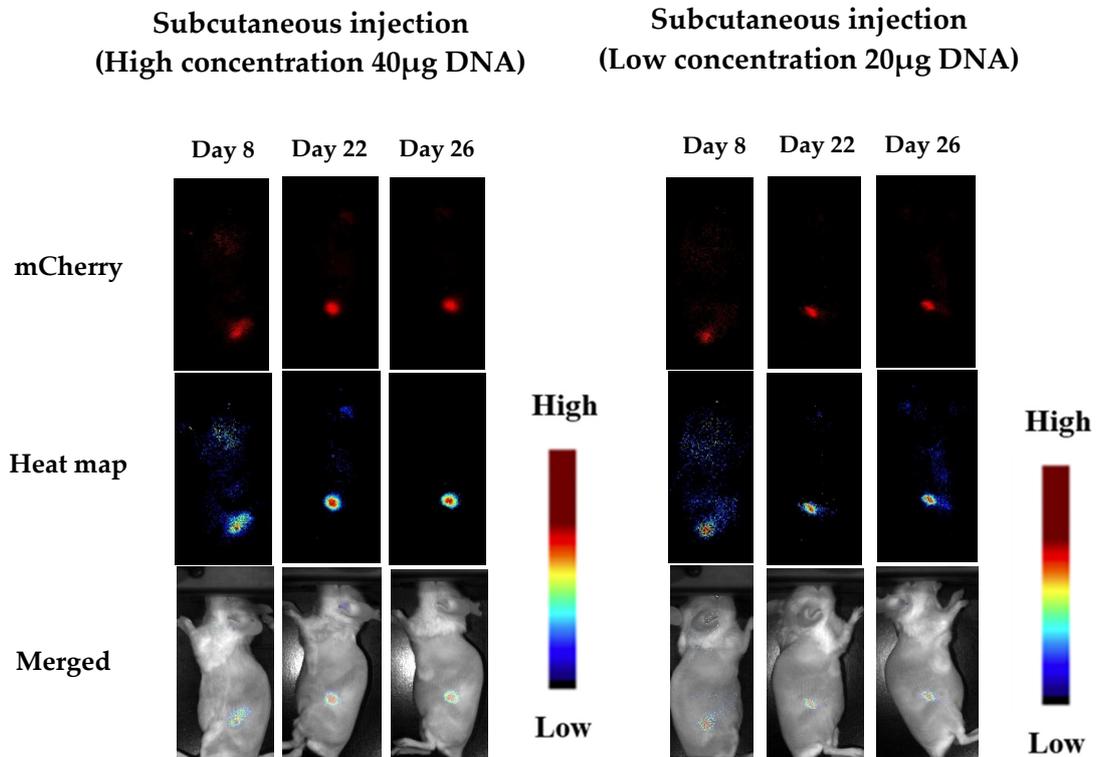
**Figure S2.** Imaging with Incucyte system (10X) for polyplexes (400, 200 and 50nm) with HEK293T, HELA and NIH-3T3 cells after 1 week incubation (scale bar 400 $\mu$ m, area: 1.75 x 1.29 mm, 2.27mm<sup>2</sup>). (A1) Control cells, (A2) 6nmol lipid/ 0.5 $\mu$ g GFP, (A3) 12.5 $\mu$ g NHG's/ 0.5 $\mu$ g GFP (200nm), (A4) 2.5 $\mu$ g NHG's/0.5 $\mu$ g GFP (400nm), (A5) 5 $\mu$ g NHG's/0.5 $\mu$ g GFP (400nm), (A6) 10 $\mu$ g NHG's/0.5 $\mu$ g GFP (400nm), (A7) 12.5 $\mu$ g NHG's/ 0.5 $\mu$ g GFP (400nm), (A8) 10 $\mu$ g NHG's/0.5 $\mu$ g GFP (50nm), (A9) 12.5  $\mu$ g NHG's/0.5 $\mu$ g GFP (50nm) (A10) 15 $\mu$ g NHG's/0.5 $\mu$ g GFP (50nm) and (A11) 20 $\mu$ g NHG's /0.5 $\mu$ g GFP (50nm).



**Figure S3.** Fluorescence microscopic images (10X) of 200 nm polyplexes with HEK293T cells after 6 days incubation (10% FBS from time zero) (Scale bar for all the pictures - 100µm). (A) Control cells, (B) 12.5 µg NHG's alone, (C) 0.5 µg GFP alone, and (D) 12.5 µg NHG's/0.5 µg G



**Figure S4.** Detection of m-Cherry after Intramuscular administration for days 8, 22 and 26.



**Figure S5.** Detection of m-Cherry after subcutaneous administration for days 8, 22 and 26.