Potent calcium phosphate nanoparticle surface coating for in vitro and in vivo siRNA delivery: a step toward multifunctional nanovectors.

Supplementary informations

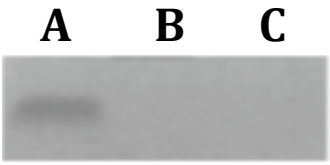

Figure S1: Analysis of the serum stability of CPnp(siCont/PEIY)$_2$ and CPnp(siCont/PEIY-Gal)$_2$ nanoparticles by gel retardation assay.
SiCont (A), CPnp(siCont/PEIY)$_2$ (B) and CPnp(siCont/PEIY-Gal)$_2$ (C), representing 1 µg siRNA, have been incubated for 1 hour in 100% FBS at room temperature. To evaluate siRNA release, samples were then subjected to an electrophoresis in a 2% agarose gel (100v, 1h). For both nanoparticle suspensions (lines (B) and (C)) no siRNA is visible after BET staining of the gel compared to the siRNA alone (line (A)). We conclude therefore that CPnp(siCont/PEIY)$_2$ and CPnp(siCont/PEIY-Gal)$_2$ are stable in serum. No siRNA release should be expected after intravenous injection.

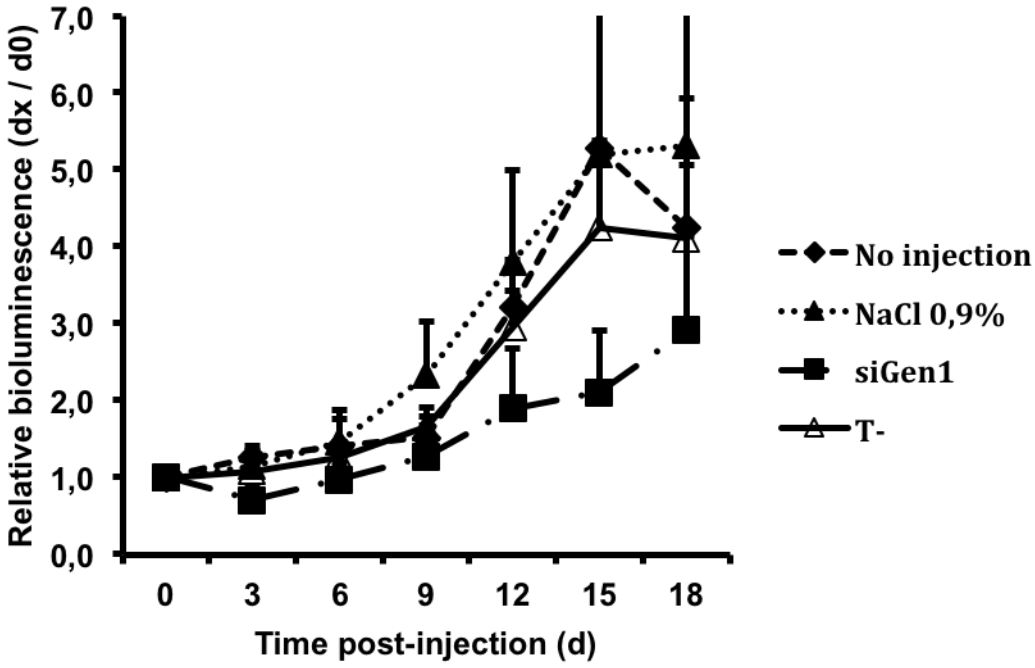

Figure S2: Relative bioluminescence of control tumors.
Relative bioluminescence of A549luc subcutaneous control tumors in nude mice (Mean±SE) that have been left non-injected (no injection, n=10) or that received 8 injections (arrows) of vehicle (PBS, n=6) or CPnp(siGen1/PEIY)$_2$ representing 25 µg of control siRNA (siGen1, n=9). Ctrl indicates the pooled results of all 25-control tumours.