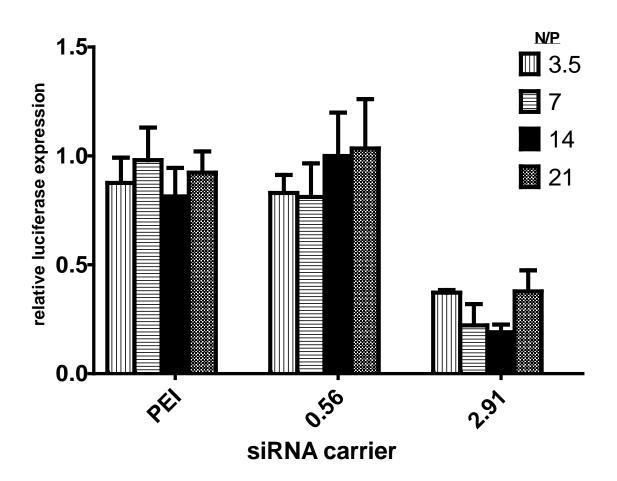
## **Supplementary Information**

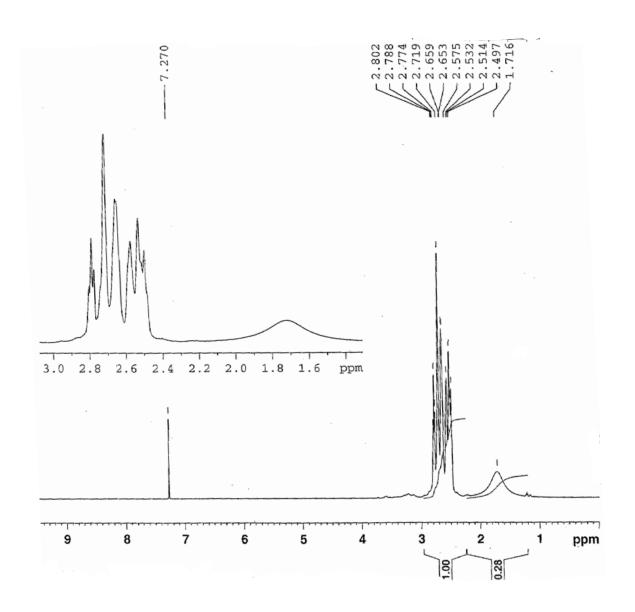
#### S1. Luciferase expression at various N/P ratios

Luciferase expressing HeLa cells were incubated with particles complexed with siRNA at various N/P ratios. Following these experiments an N/P of 14 was selected.

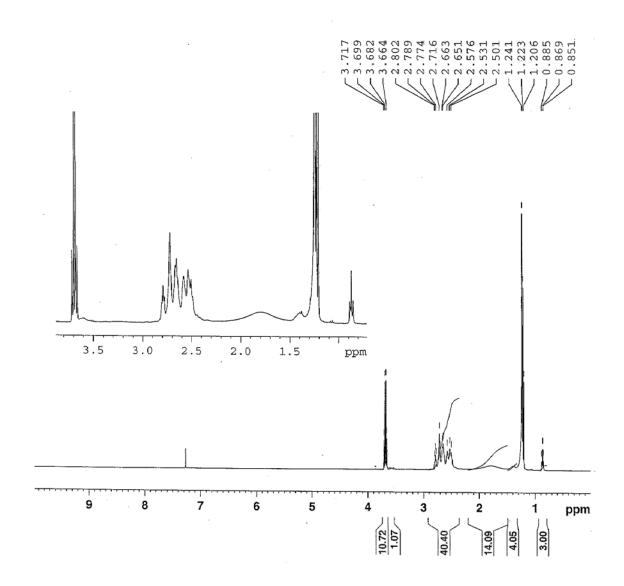


#### S2. (A) NMR analysis of the product - PEI

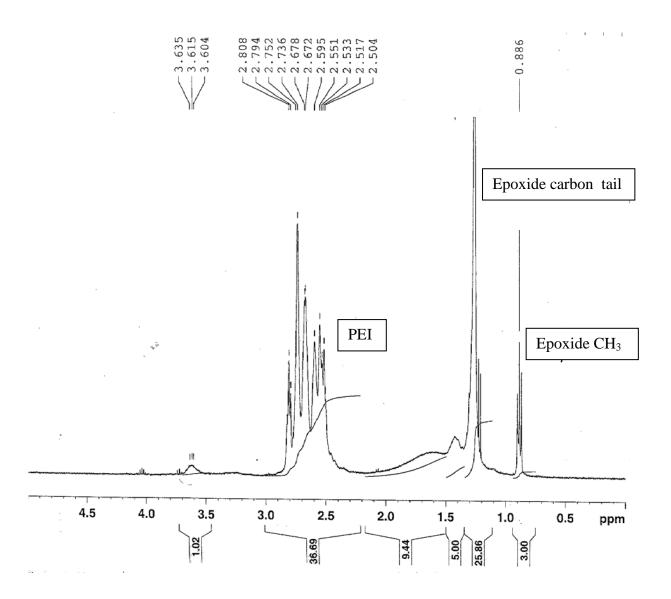
The product was dissolved in deuterated DMSO and characterized by 1H-NMR (400 MHZ, Bruker, Billerica, MA), structures coincide with previous publications on similar compounds.



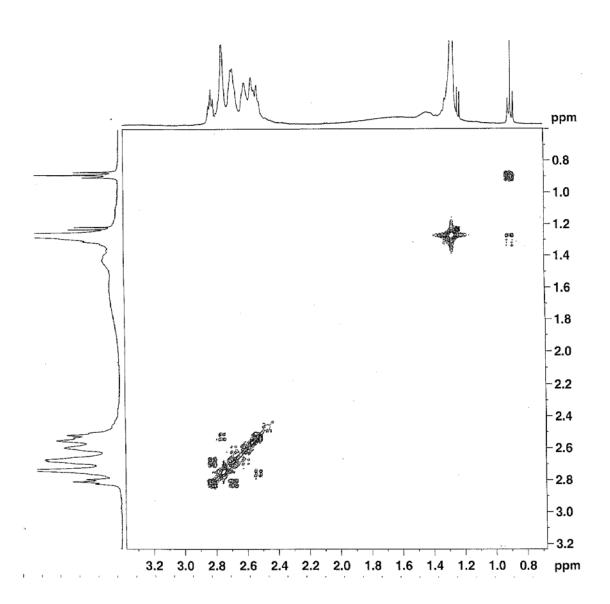
### S2. (B) NMR analysis of the product – conjugated PEI



### S2. (C) NMR analysis of the product – conjugated PEI

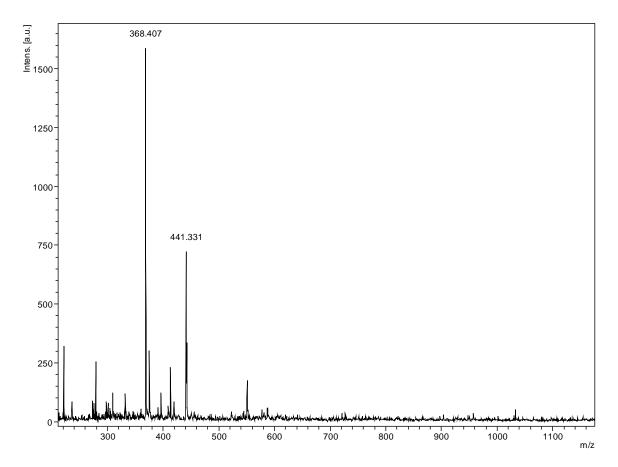


### S2. (D) 2D NMR analysis of the product – conjugated PEI

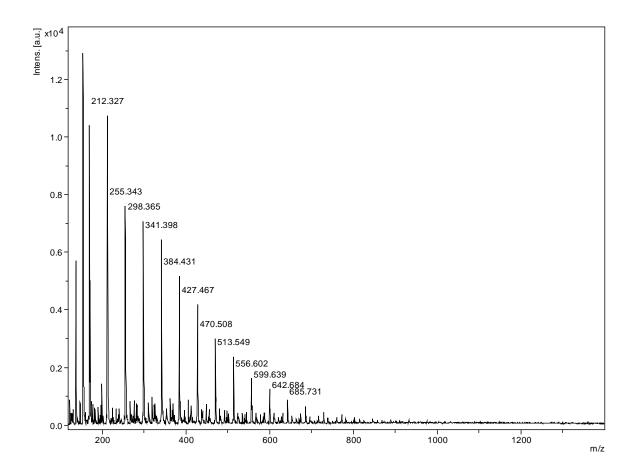


### S3. (A) MALDI TOF Mass Spectrometry analysis of the product – PEI

The product was characterized using matrix-assisted laser desorption ionization time of flight (MALDI-TOF) mass spectrometry.



# S3. (B) MALDI TOF Mass Spectrometry analysis of the product – conjugated PEI (0.28)



# S3. (C) MALDI TOF Mass Spectrometry analysis of the product – conjugated PEI (1.96)

