Supporting Information

Functionalized Large Pore Mesoporous Silica Nanoparticles for Gene Delivery featuring Time-dependent Release and Codelivery[†]

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Fig. S1 Nitrogen sorption curves of LPMSN, A-MSN and PDMAEA-LPMSN

Table S1 Physicochemical properties of samples

Sample	BET Surface Area	Pore Volume	Cavity
	$(\mathbf{m}^2/\mathbf{g})$	(cc/g)	(nm)
LPMSN	451	0.70	11.0
A-MSN	415	0.67	11.0
PDMAEA-LPMSN	105	0.32	10.2



Fig. S2 2-azido-N-(3-(triethoxy silyl)propyl)propanamide or Azide silane (A) and poly(2dimethylaminoethyl acrylate) (PDMAEA) (B)



Fig. S3 TGA analysis of LPMSN and functionalised LPMSN



Fig. S4 High resolution XPS analysis of N1s spectra for (A) A-MSN and (B) PDMAEA-LPMSN