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Supplemental Information

Co-assembled Ca²⁺ Alginate-Sulfate

Nanoparticles for Intracellular

Plasmid DNA Delivery

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1 **Supplementary Information**

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3 **Co-assembled Ca²⁺ alginate-sulfate nanoparticles for intracellular**
4 **plasmid DNA delivery**

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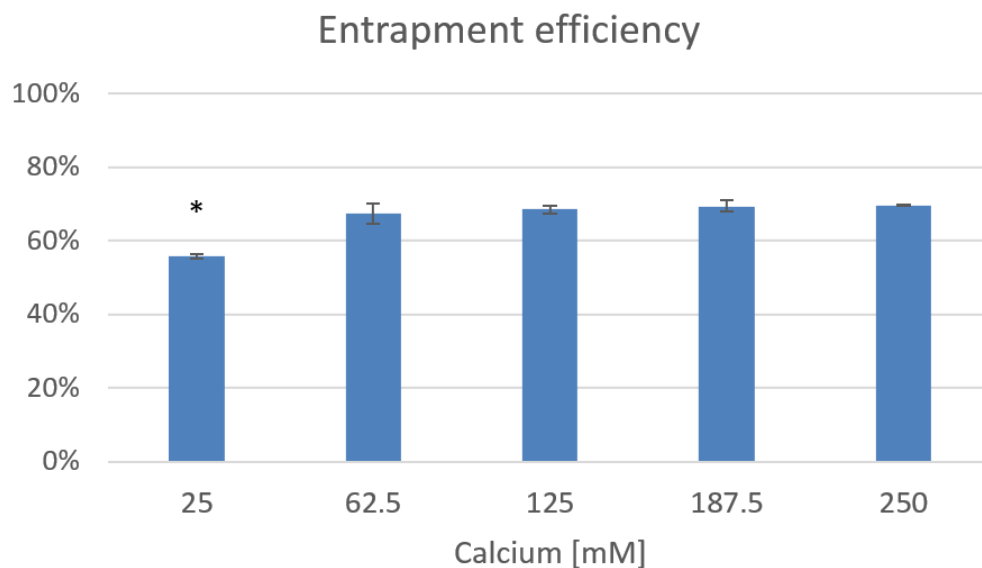
23 Supplementary tables

24 **Table S1. XPS analysis.** Binding energies of C, N, O, P, Ca and S in AlgS-Ca²⁺-pDNA NPs vs.
25 complexes of Ca²⁺-pDNA

Sample	Binding energy [eV]					
	C1s	N1s	O1s	P2p	Ca2p	S2p
Ca ²⁺ -pDNA complex	284.8	399.3	532.7	133.6	348.0	N/A
AlgS-Ca ²⁺ -pDNA NPs	284.7	399.7	532.5	134.5	348.0	168.8

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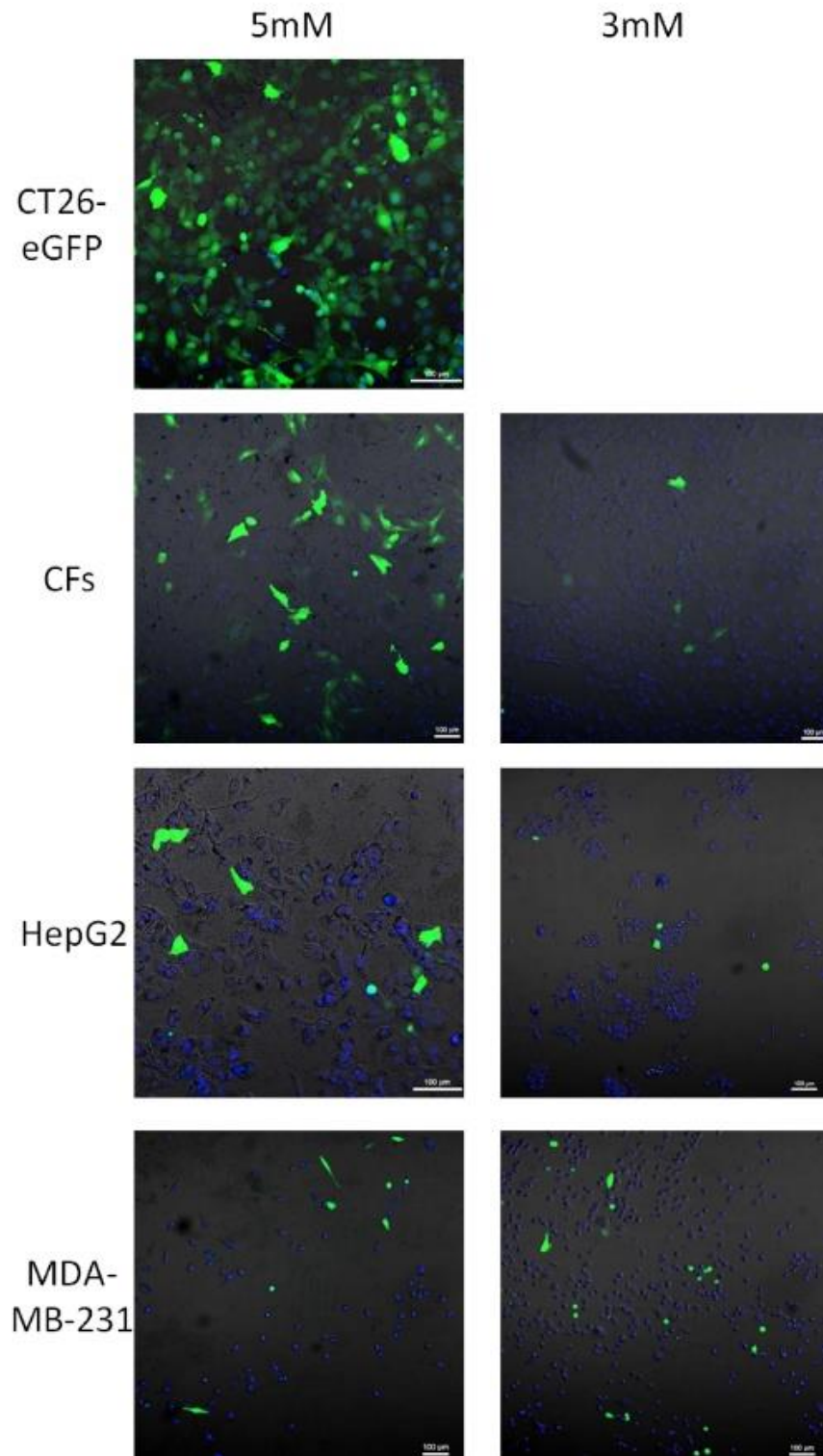
27 Supplementary figures



28

29 **Fig. S1. The entrapment efficiencies of AlgS-Ca²⁺-pDNA NPs with different calcium ion**
30 **concentrations in the particle.** The entrapment efficiency in NPs with 25 mM is statistically-
31 significant lower than in NPs with greater Ca²⁺ concentrations (p<0.05). There is no change in
32 efficiency for concentrations higher than 62.5 mM. Error bars represent SEM (n = 3)

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35 **Figure S2. LSCM images of GFP expression** by different cells transfected with different Ca^{2+}

36 concentration based pDNA nanoparticles. Nuclei are in blue and GFP is in green.