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Protocol status: In development
We are still developing and optimizing this protocol

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Green Lab Nanoparticle Prep For In Vivo

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DISCLAIMER

draft

ABSTRACT

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Background (Materials in bold)

1 This protocol is to generate 3x100ul DNA nanoparticle injections at 40 w/w (DNA:polymer) and 0.25 mg/ml DNA.
-100 ul injections per mouse, 350 ul NP+DNA per frozen tube (thaw before animal injection).
-DNA stock should be 1 ug/ul
-Polymer stock should be 100 ug/ul
-For 40 w/w, 88 ug DNA/tube, 3500 ug polymertube
-Excipient is 90 ug/ul sucrose (stock sucrose is 500 ug/ul)
-Final volume 350ul before freezing (287 ul NP, 63 ul excipient)
-Sodium acetate pH 5

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Formulation Add In Sequence By Row

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	A	B	C	D	E
	Reagent	Volume for 3x100ul Injections	For 30x100ul injections		
	NaAc pH5	165	1650		
	Polymer (100ug/ul in DMSO)	35	350		
	DNA in H2O (1ug/ul)	88	880		
	Sucrose (500ug/ul)	62	620		
	Sum	350ul	3500 ul		

According to layout above by row, In 1.5 ml or 15 ml tube, add NaAc followed by polymer, followed by DNA. Wait 10 mins. Add excipient. Mix and freeze at -80.