

Supplementary Materials

Successful Incorporation of Exosome-capturing Antibody-siRNA Complexes into Multiple Myeloma Cells and Suppression of Targeted mRNA Transcripts

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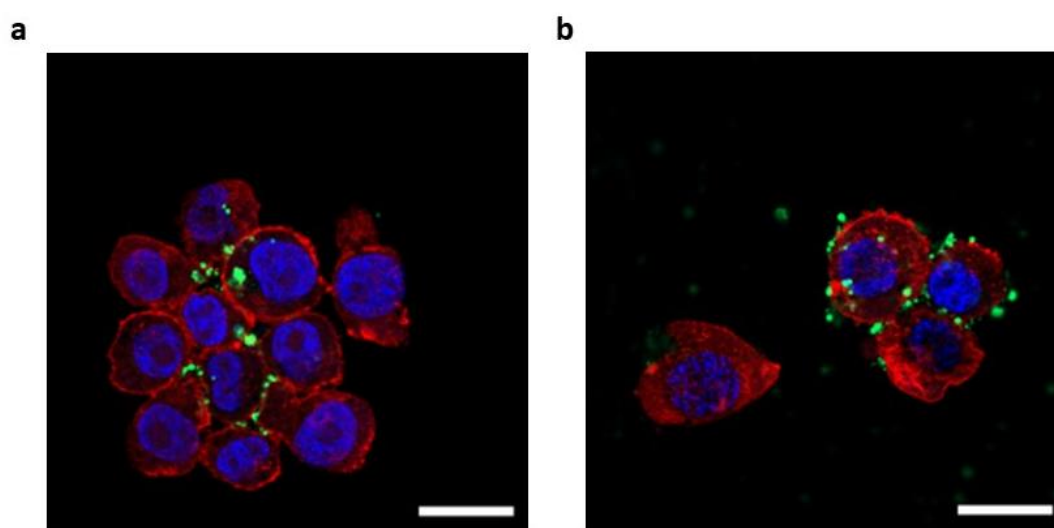


Figure S1. Confocal microscopic images of anti-CD63 mAb-branched Arg conjugated siRNA complexes transferred into NCI-H929 cells. NCI-H929 cells were treated with anti-CD63 mAb-conjugated siRNA labeled with fluorescence at anti-CD63 mAb-Arg linker- siRNA ratios of 1:1 (300:300 nM) (a) and 5:1 (1500:300 nM) (b). Scale bars, 20 μ m. Red, rhodamine-phalloidin; blue, Hoechst 33342 (nuclei); green, FITC-labeled siRNAs.

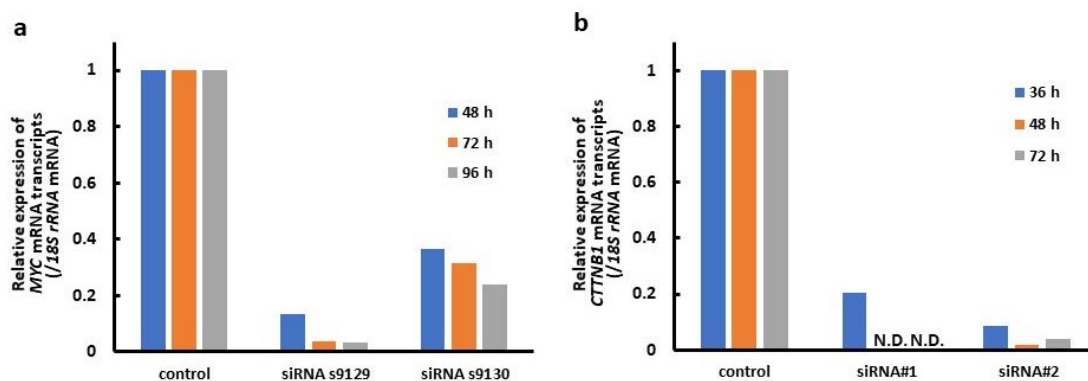


Figure S2. Evaluation of the efficacies of siRNAs against *MYC* and *CTNNB1*. **(a)** Both siRNAs targeting *MYC* effectively suppressed *MYC* mRNA transcripts in HeLa cells; siRNA s9129 was more effective than siRNA s9130. The optimal duration for silencing *MYC* mRNA transcripts by siRNA s9129 was 96 h. **(b)** Both siRNAs targeting *CTNNB1* effectively suppressed *CTNNB1* mRNA transcripts in HeLa cells; siRNA #2 was more effective than siRNA #2. The optimal duration for silencing *CTNNB1* mRNA transcripts by siRNA #1 was 48 h. N.D., not done.

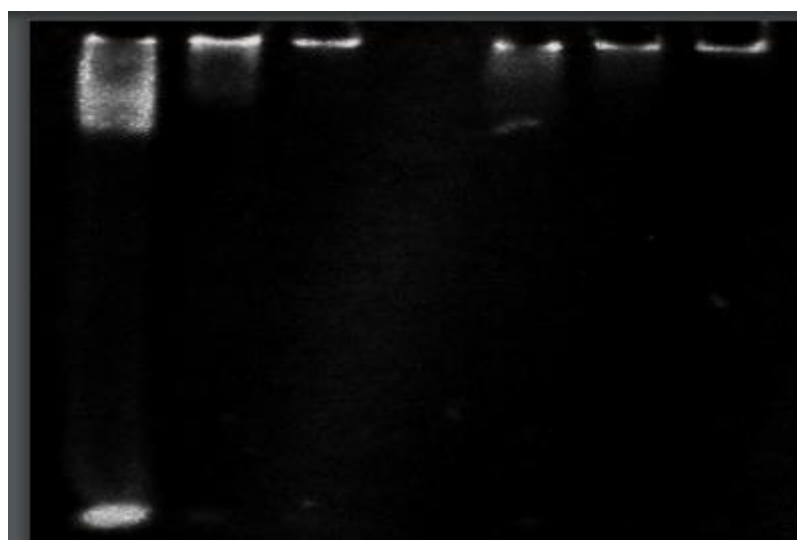


Figure S3. Western Blot.

Table S1. Sequences of siRNAs used in this study.

Target	Orientation	Length (bp)	Sequence
<i>Luc2</i>	Forward	21	5'-AUUGAAUCUUAUAGUCUUGCA-3'
	Reverse	21	5'-CAAGACUAUAAGAUUCAAUUCU-3'
<i>Luc+</i>	Forward	21	5'-UCUUCAUAGCCUUAUGCAGUU-3'
	Reverse	21	5'-CUGCAUAAGGCUAUGAAGAGA-3'
<i>F-luc2</i>	Forward	21	5'-AUUGAAUCUUAUAGUCUUGCA-3'
	Reverse	20	5'-F- CAAGACUAUAAGATUCAAUUCU-3'
<i>MYC</i> s9129	Forward	20	5'-AGACCUUCAUCAAAAAACA-3'
	Reverse	19	5'-AUGUUUUUGAUGAAGGUCU-3'
<i>MYC</i> s9130	Forward	19	5'-GAGCUAAAACGGAGCUUUU-3'
	Reverse	18	5'-AAAAGCUCCGUUUUAGCU-3'
<i>CTNNB1</i> siRNA#1	Forward	21	5'-P-GCUUUAGUAAAUAUAAUGAGG-3'
	Reverse	21	5'-P-UCAUUUAUAUUUACUAAAGCUU-3'
<i>CTNNB1</i> siRNA #2	Forward	21	5'-P-GUUGUAAACUUGAUUAAACUAAU-3'
	Reverse	21	5'-P-AGUUAAUCAAGUUUACAAACUG-3'

bp, base pair; — 2'-OMe modification; — locked nucleic acid (LNA) modification; — LNA with methylcytosine modification; — 2'-fluoro modification; P, 5'-phosphorylated modification.

Table S2. Sequences of primers used for qRT-PCR in this study.

Target	Orientation	Length (bp)	Sequence	Probe number
<i>c-MYC</i>	Forward	20	5'-GCTGCTTAGACGCTGGATTT-3'	#66
	Reverse	18	5'-TAACGTTGCGGGGCTTCG-3'	
<i>CTNNB1</i>	Forward	20	5'-GCTTTCAGTTGAGCTGACCA-3'	#21
	Reverse	20	5'-CAAGTCCAAGATCAGCAGTCTC-3'	
<i>18S rRNA</i>	Forward	20	5'-GCAATTATTCCCCATGAACG-3'	#48
	Reverse	20	5'-GGGACTTAATCAACGCAAGC-3'	

bp, base pair.