Supplementary Materials

Table S1. The sequences of oligonucleotides used in this study.

Name		Sequence (5′ to 3′)
		siRNA
PLK1	sense	aga u*ca ccc u*cc uu*a aau* auu
	antisense	uau uua ag*g agg gug au*c uuu
Cd31	sense	gug cau agu uca agu gac aTT
	antisense	ugu cac uug aac uau gca cTT
Vegfr2	sense	cca gug gac gga uga uca aTT
	antisense	uug auc auc cgu cca cug gTT
		primer
PLK1	forward	CTC CTT GAT GAA GAA GAT CAC C
	reverse	GAA GAA GTT GAT CTG CAC GC
GAPDH	forward	CCT CTG ACT TCA ACA GCG AC
	reverse	CGT TGT CAT ACC AGG AAA TGA G
Cd31	forward	TAC AGT GGA CAC TAC ACC TG
	reverse	GAC TGG AGG AGA ACT CTA AC
Vegfr2	forward	GAT TTC ACC TGG CAC TCT C
	reverse	CTT GGT CAC TCT TGG TCA C
Actb	forward	GAA GGA GAT TAC TGC TCT GG
	reverse	ACA CAG AGT ACT TGC GCT CA

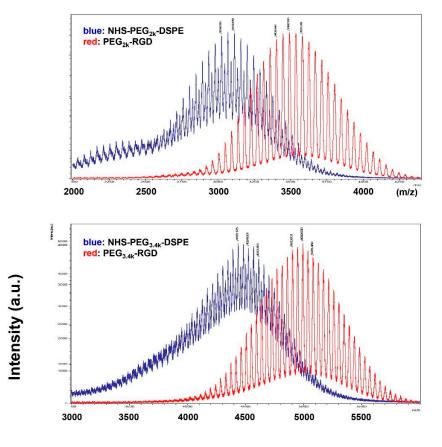upper case, DNA; lower case, RNA; *, 2′-OMe modification.
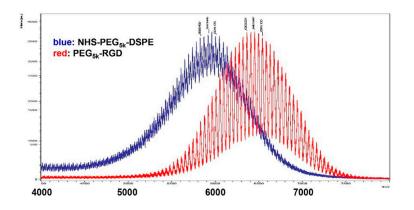

Figure S1. *Cont.*

Figure S1. The mass spectrum of RGD PEG-lipids. Purified RGD PEG-lipids were subjected to matrix assisted laser desorption ionization time-of-filght mass spectrometry (MALDI TOF-MS).
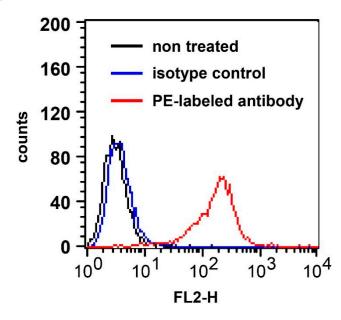

Figure S2. The αvβ3 integrin expression of OS-RC-2 cells. To measure protein expression, 1.0×10^5 trypsinized cells were treated with 1 μg of PE-labled antibody on ice. Then, cells were analyzed by flow cytometry, FACSCalibur (Becton Dickinson). Black, blue and red lines means, non-treated cells, cells treated with isotype control antibody and cells treated with PE-labled antibody against αvβ3 integrin, respectively.
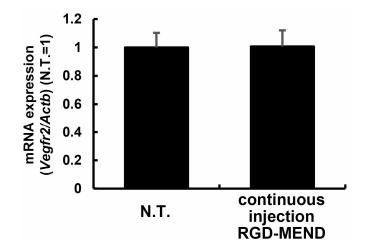
Figure S3. The gene silencing 1 week after the injection. The optimized RGD-modified MEND*in vivo* was administered into mice via the tail vein 3 times every a day, and then 1 week after the third administration *Vegfr2* mRNA level was determined by qRT-PCR.