

SUPPORTING INFORMATION

Cell culture

MG-63 human osteosarcoma cells were obtained from the American Type Culture Collection (ATCC). Fast-growing MG-63 cells were transfected with activated Ras (MG-63-Ras). mCherry-labeled MG-63-Ras were obtained by infection with a pQC-mCherry retroviral vector. Cells were grown in Dulbecco's modified Eagle's medium (DMEM) supplemented with 10% fetal bovine serum (FBS), 100 mg/ml Penicillin, 100 U/ml Streptomycin, 12.5 U/ml Nystatin, and 2 mM L-glutamin. Cells were grown at 37°C; 5% CO₂.

Tumor accumulation of PGA-PTX-E-[c(RGDfK)₂]-OG nanoconjugate

Mice bearing s.c. MG-63 human osteosarcoma at a volume of 600 mm³ were administered i.v. with PGA-PTX-E-[c(RGDfK)₂]-OG (50 μM-RGD), PGA-PTX-OG or PGA-PTX-c(RADfK)-OG (50 μM-RGD-equivalent dose) (n= 2 mice/group). Tumors were removed at 30 and 60 min after injection, washed several times with cold PBS, fixed with 3.5% paraformaldehyde for 15 min at RT and washed with PBS again. The tumors were then homogenized and scanned with the ImageStream 100 and analyzed with IDEAS software. The results showed that PGA-PTX-E-[c(RGDfK)₂]-OG nanoconjugate efficiently internalized into tumor cells at 1.6-fold increase compared with PGA-PTX-c(RADfK)-OG and PGA-PTX-OG (Figure S1).

SUPPLEMENTAL FIGURE:

Figure S1: PGA-PTX-E-[c(RGDfK)₂] nanoconjugate selectively accumulates in tumors inoculated in SCID mice FACS-sorted mCherry-labeled-MG63 cells from homogenized tumors demonstrate PGA-PTX-E-[c(RGDfK)₂]-OG preferential accumulation compared with PGA-PTX-c(RADfK)-OG and PGA-PTX-OG.

