

Supporting Information

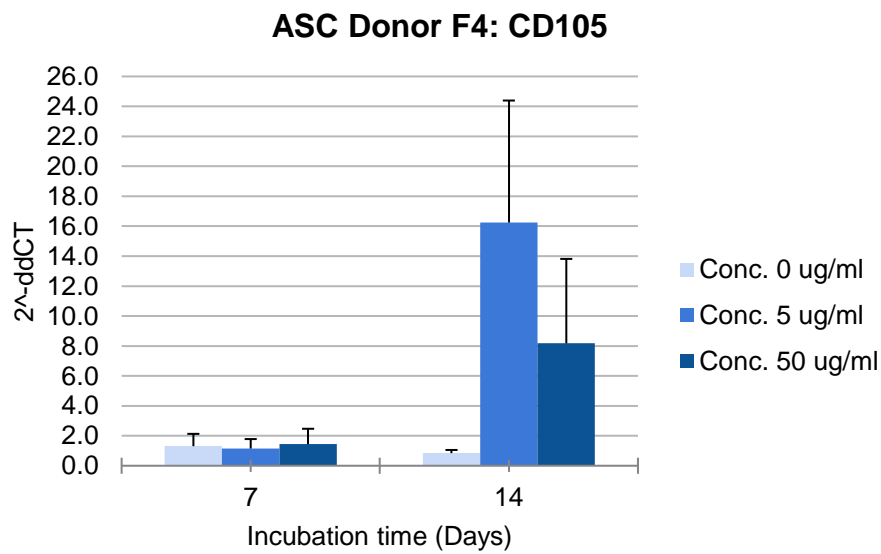
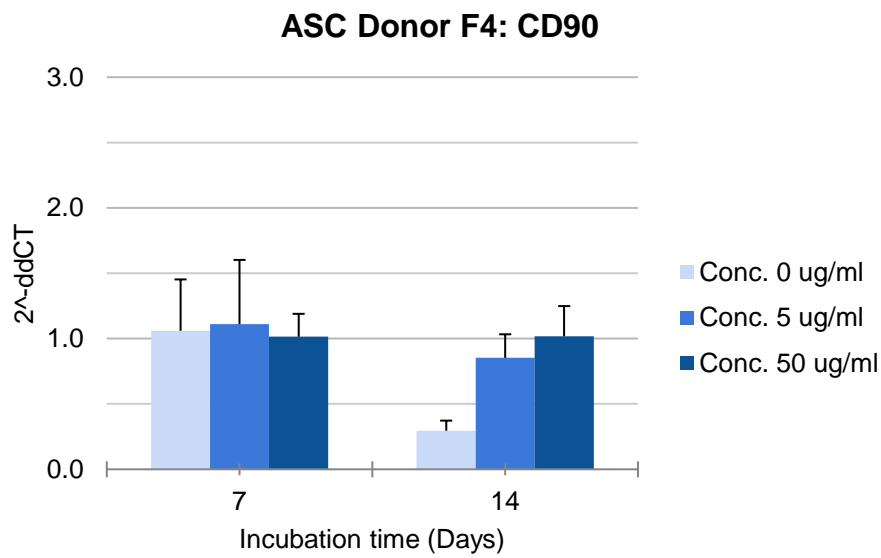
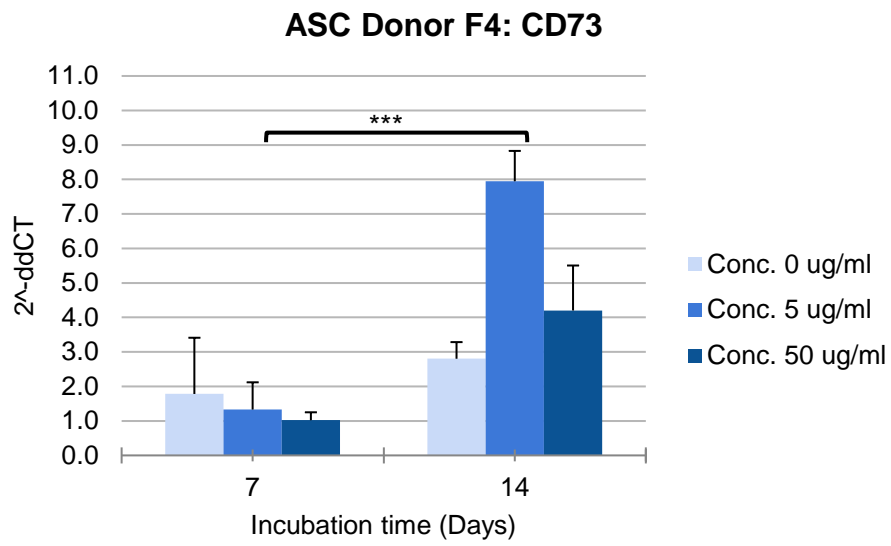
Suspension of amorphous calcium phosphate nanoparticles impact commitment of human adipose-derived stem cells *in vitro*

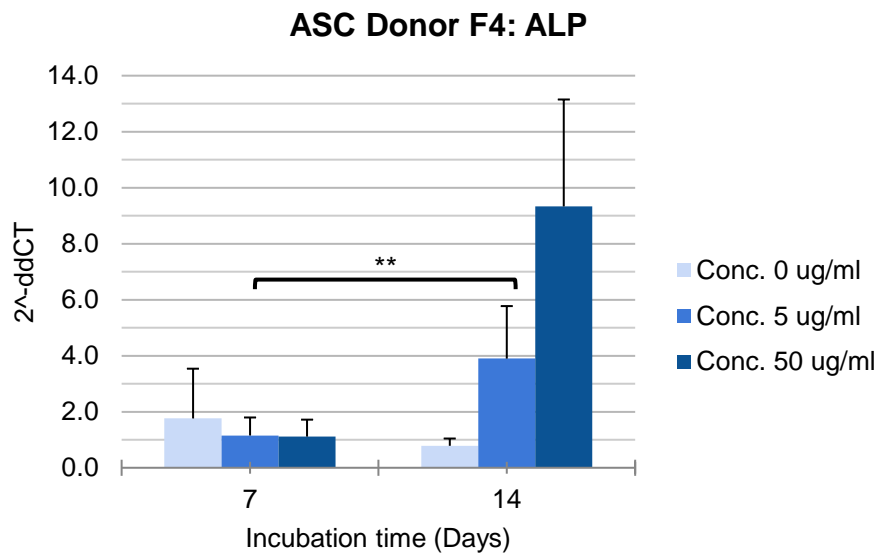
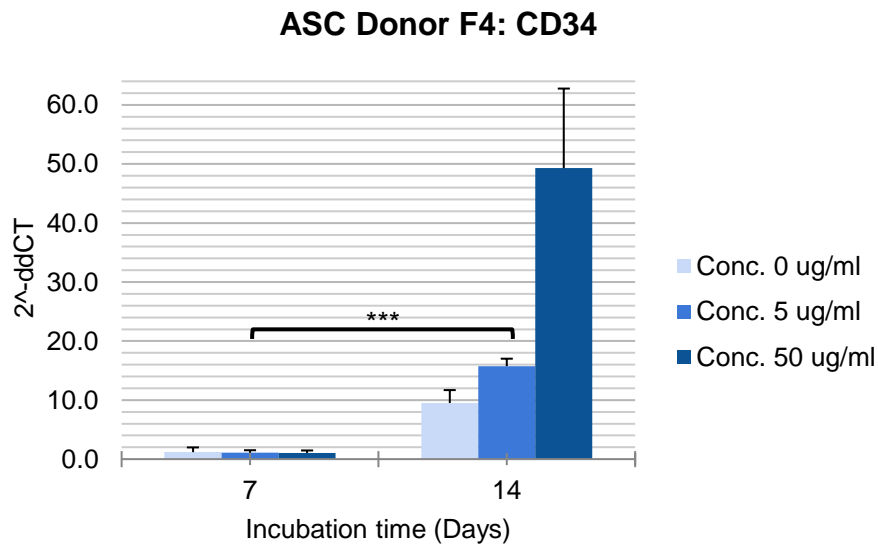
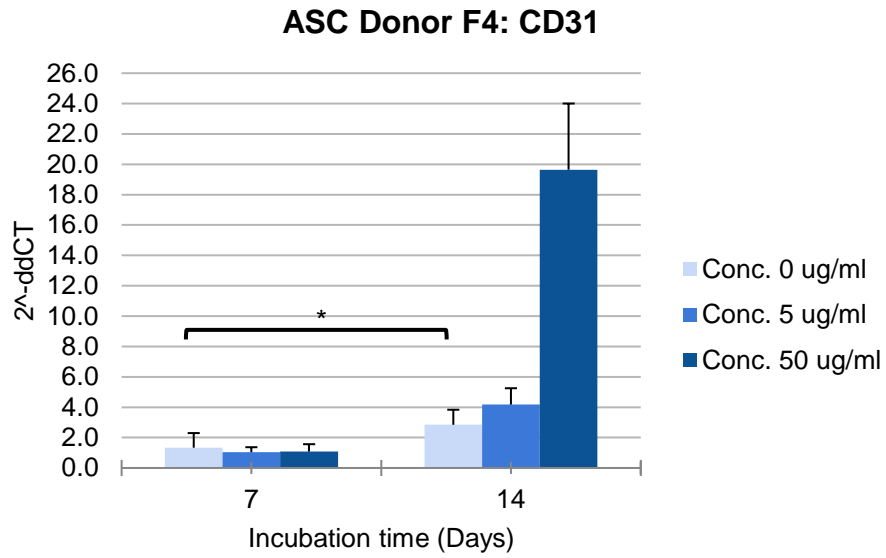
Petra Wolint¹, Lukas Näf¹, Désirée Schibler¹, Nora Hild², Wendelin J. Stark², Pietro Giovanoli¹, Maurizio Calcagni¹ and Johanna Buschmann^{1,*}

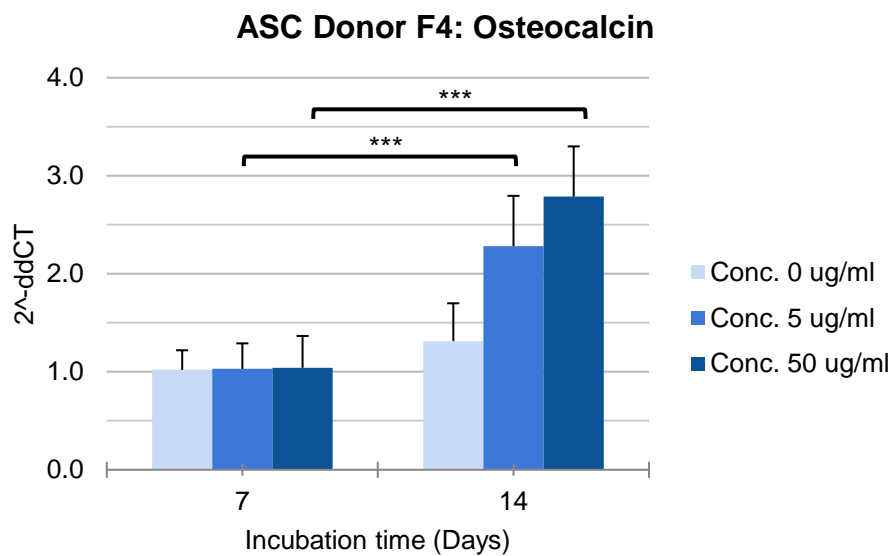
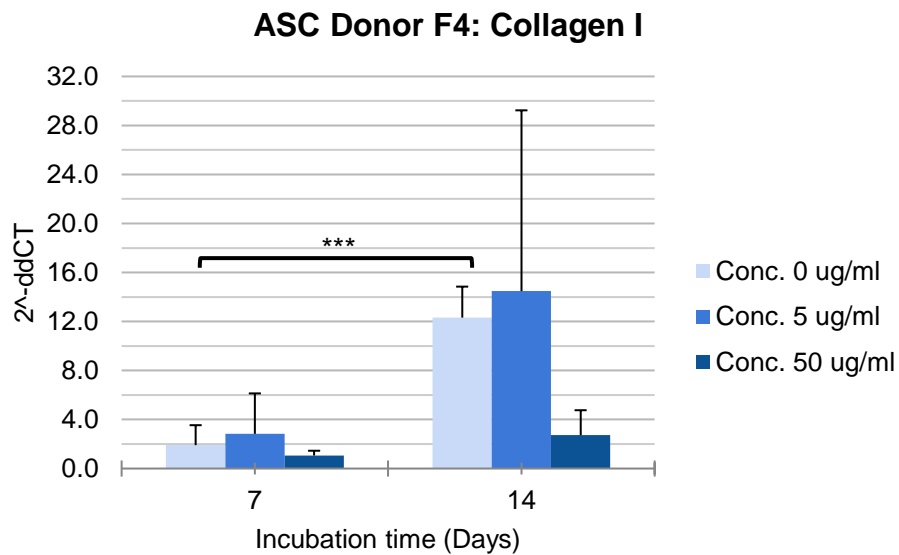
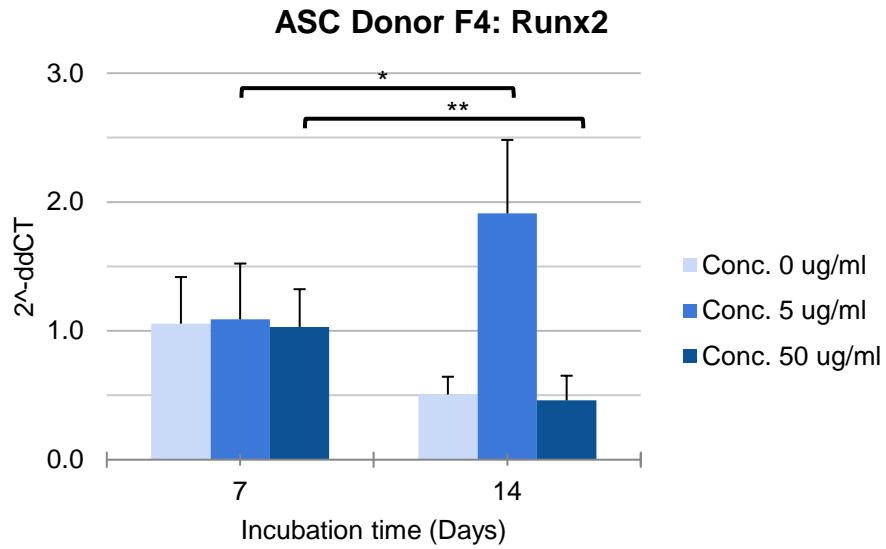
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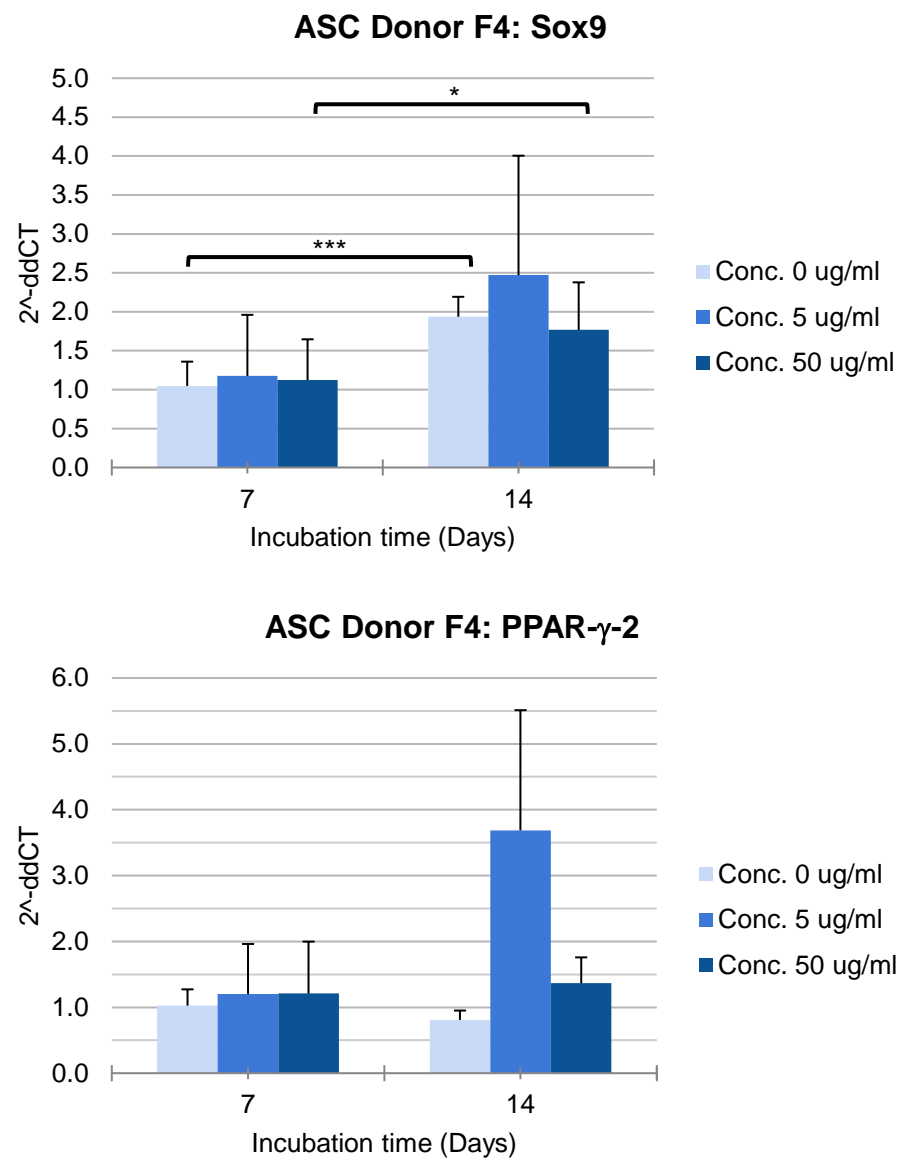
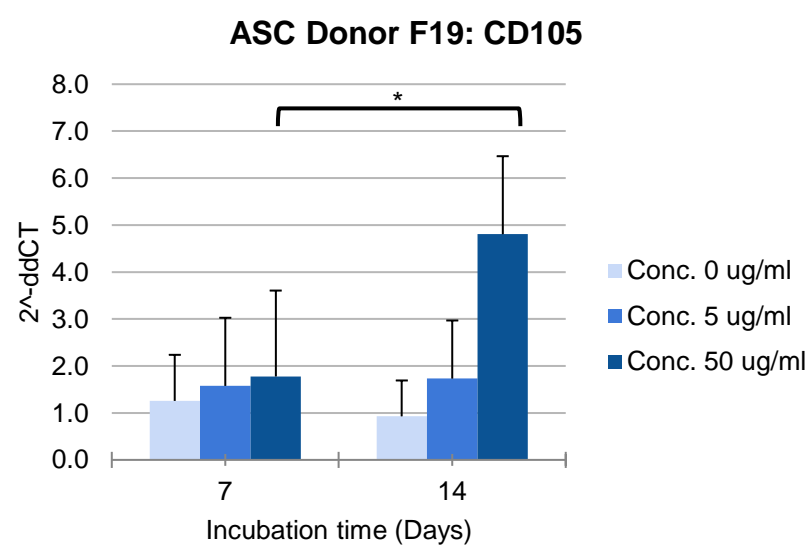
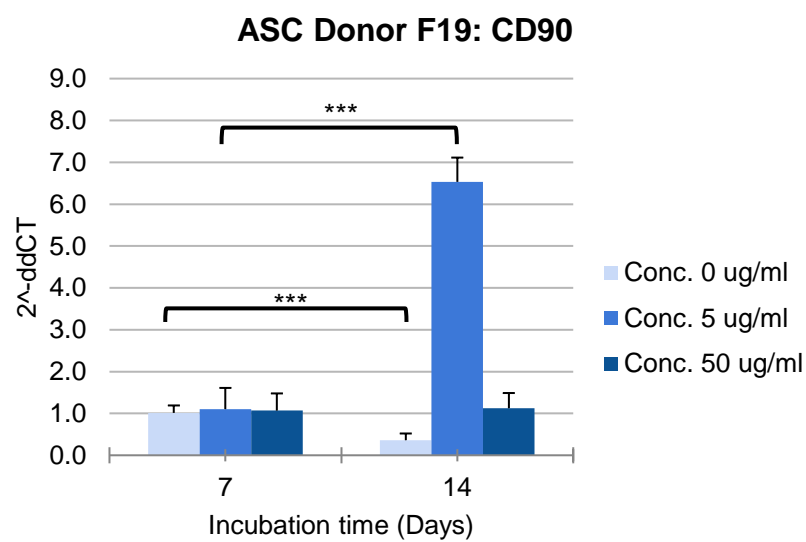
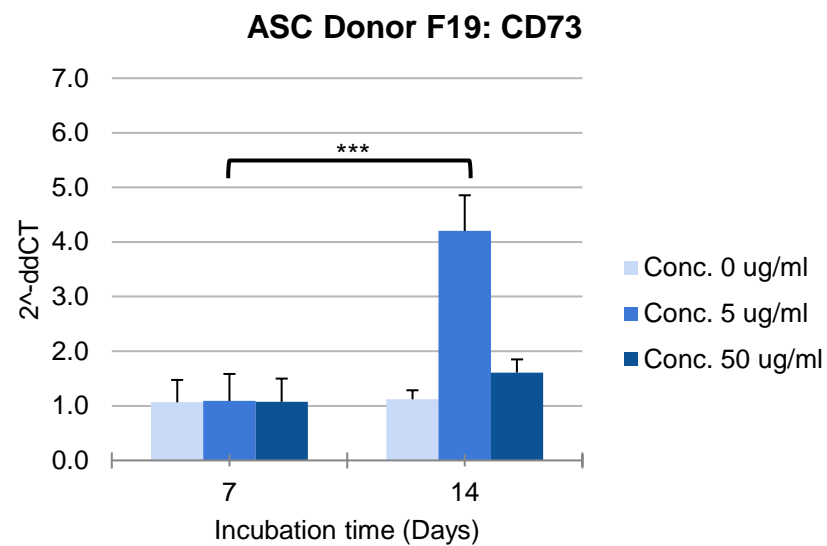
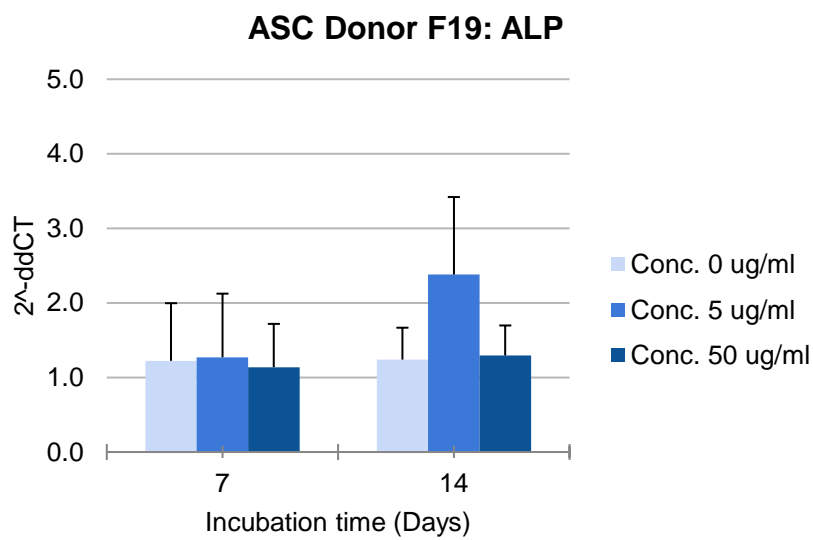
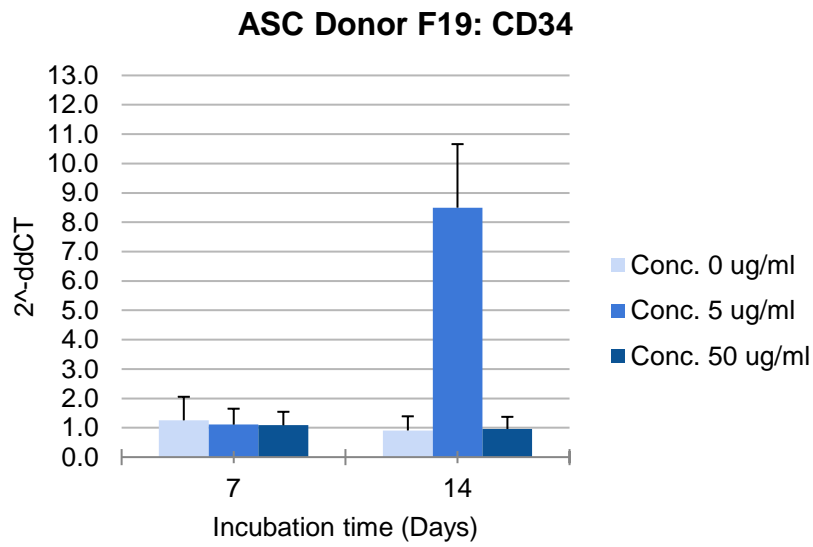
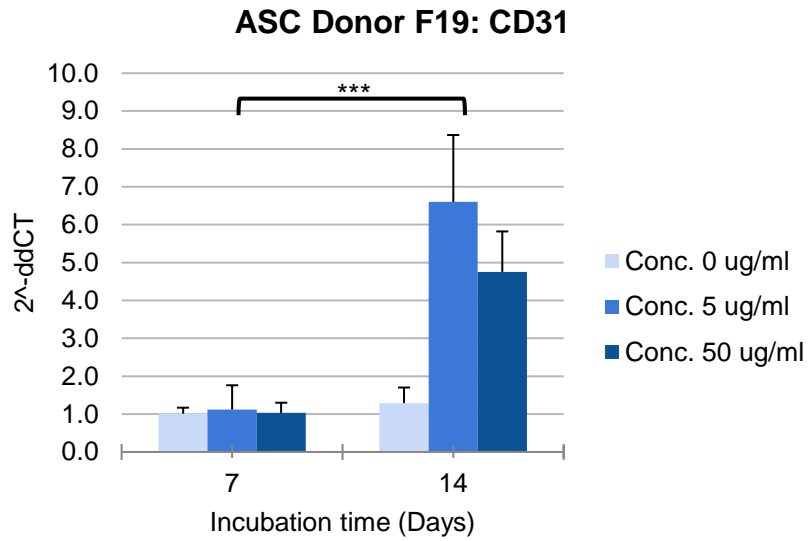
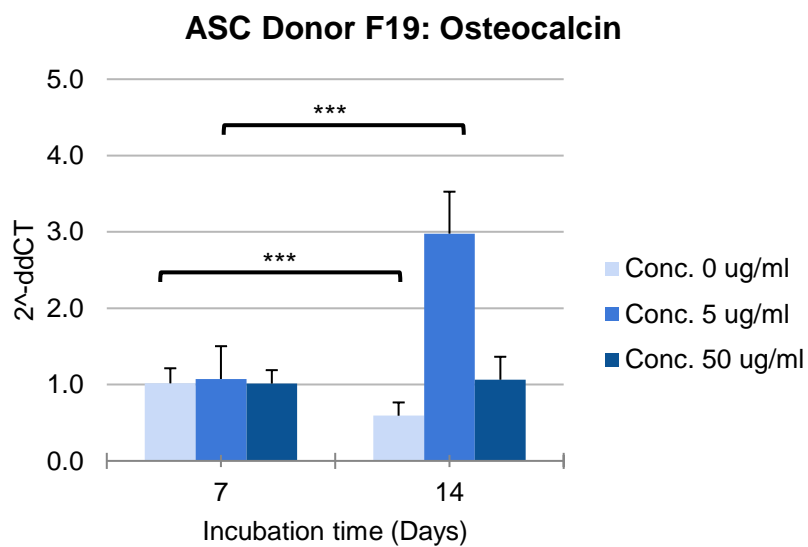
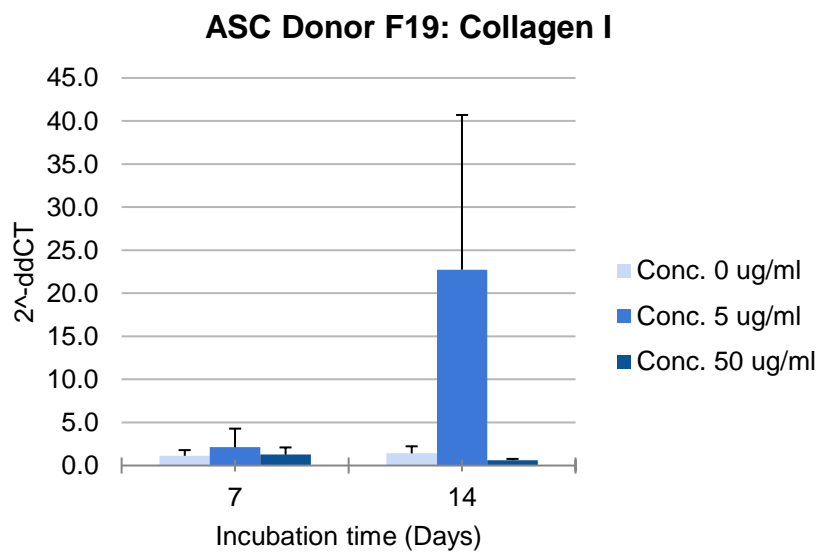
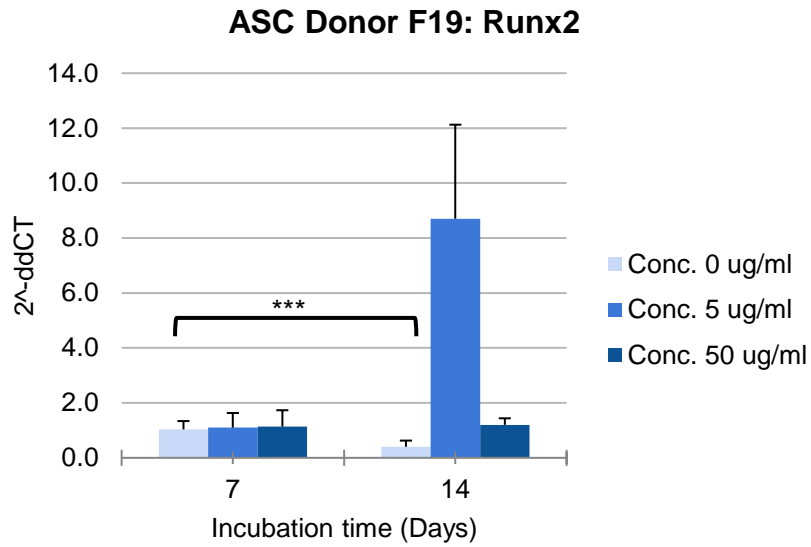


Figure S1. Average manifold induction of different genes for donor 1 (internal abbreviation F4). Experiments were carried out for three conditions and two time points, with 0, 5 or 50 ug/mL aCaP nanoparticles, denoted as Conc. = concentration and incubation for 7 or 14 days in culture, respectively.







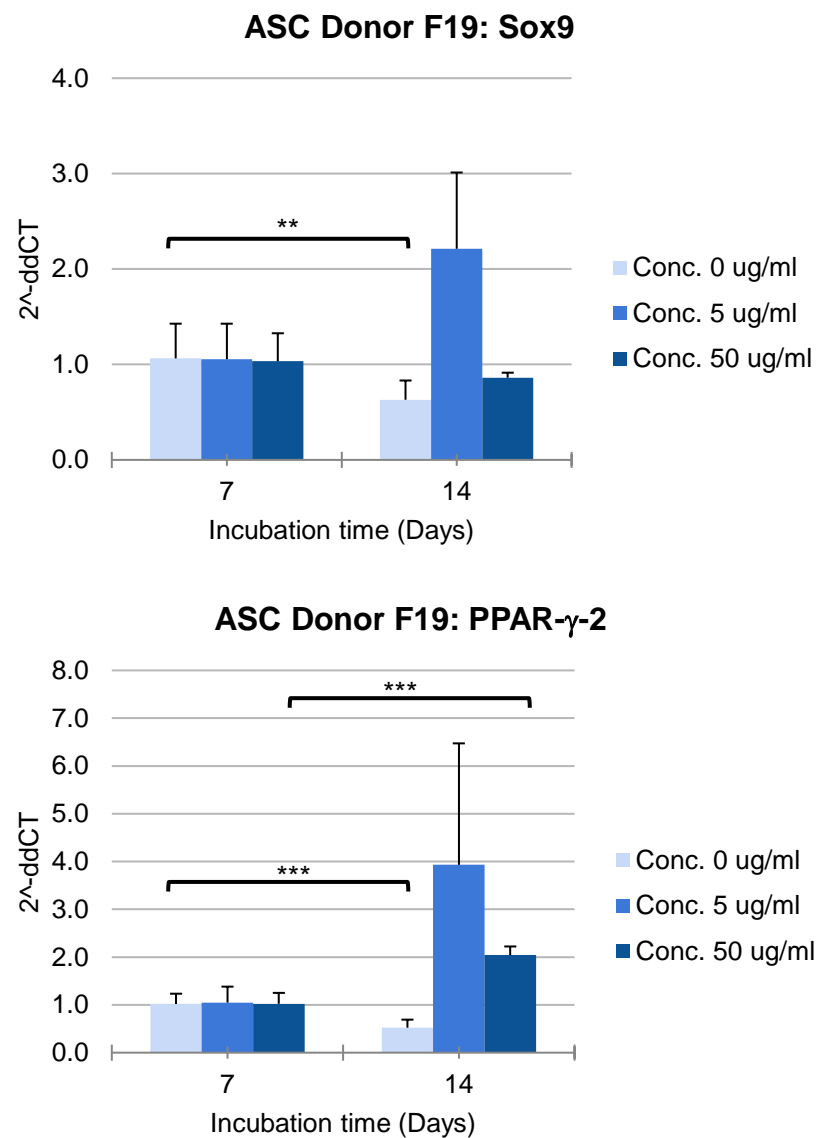
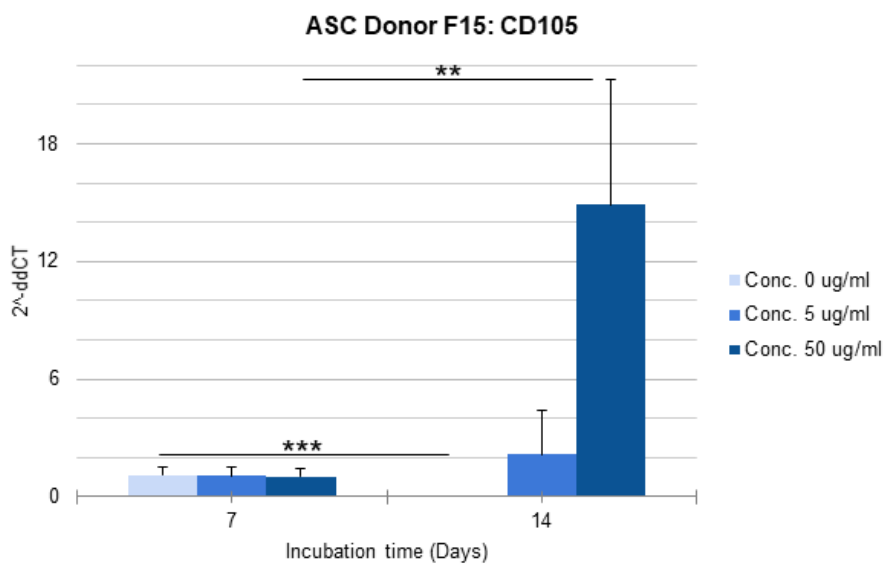
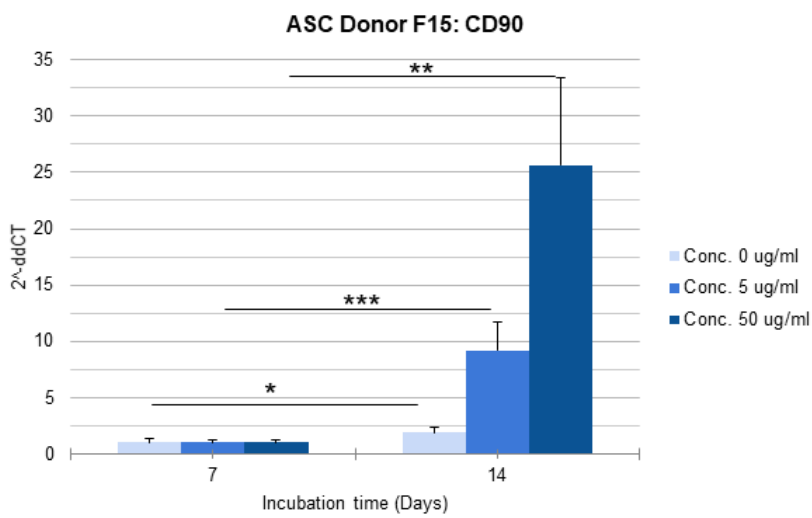
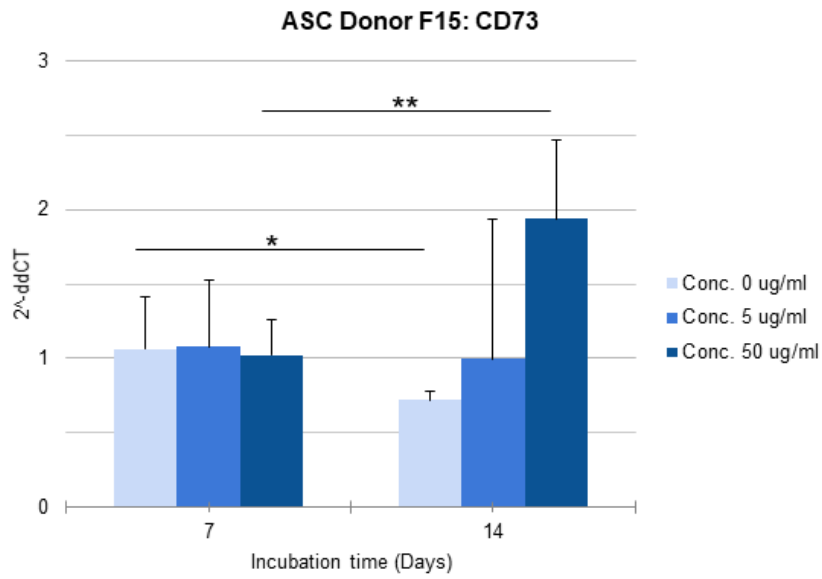
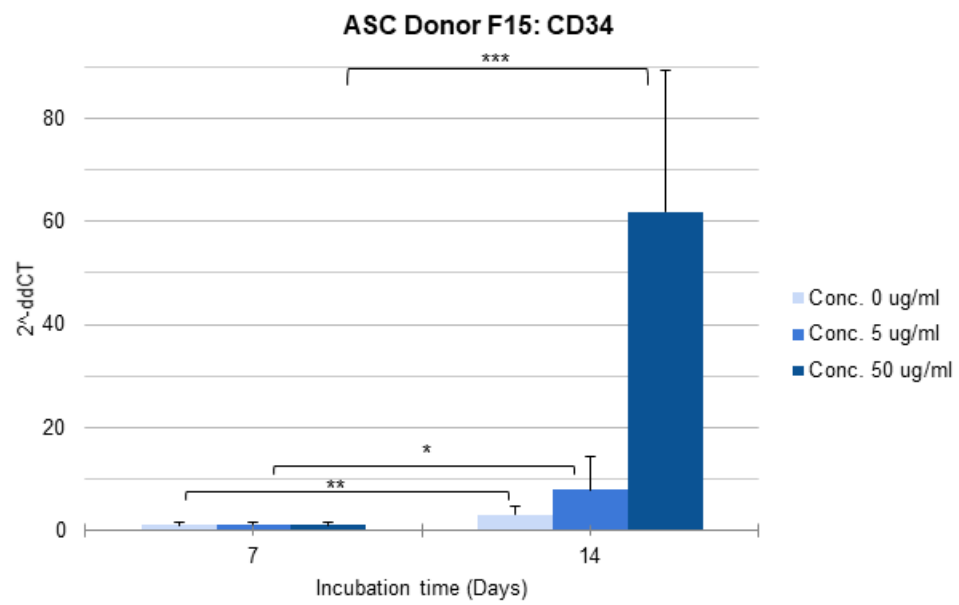
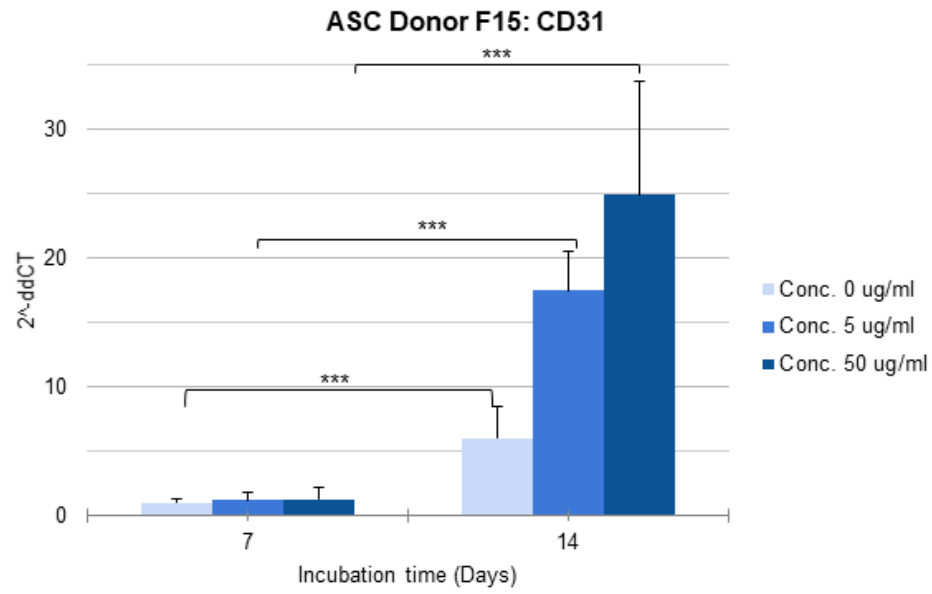
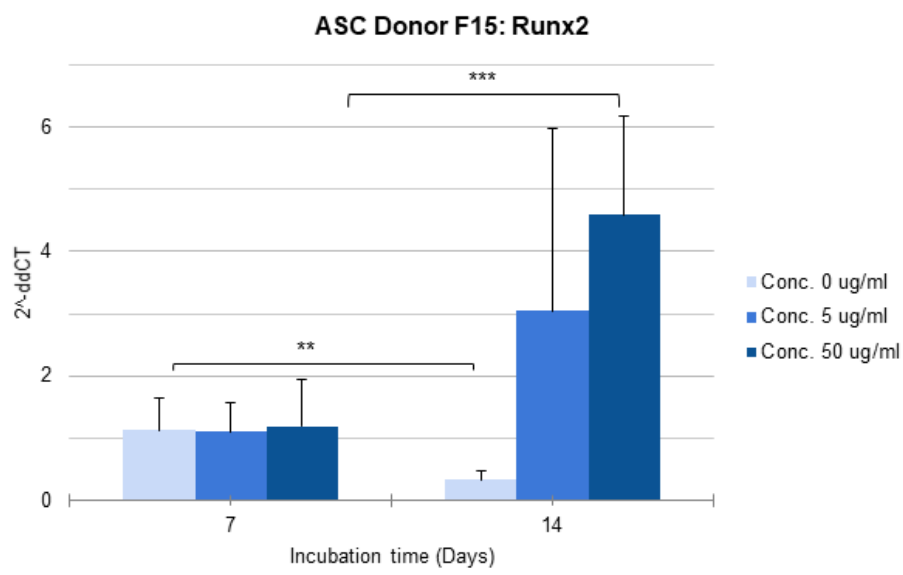
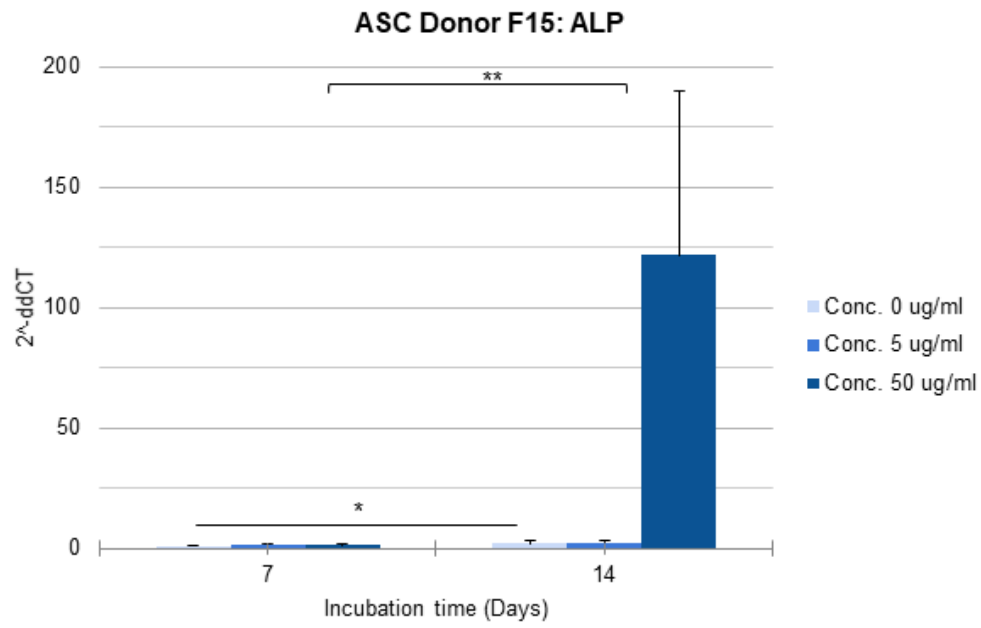
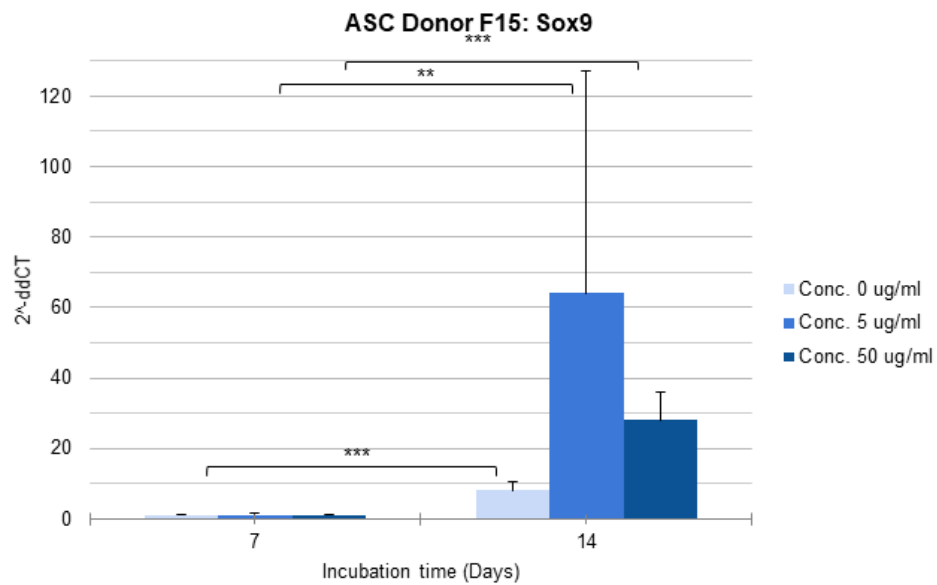
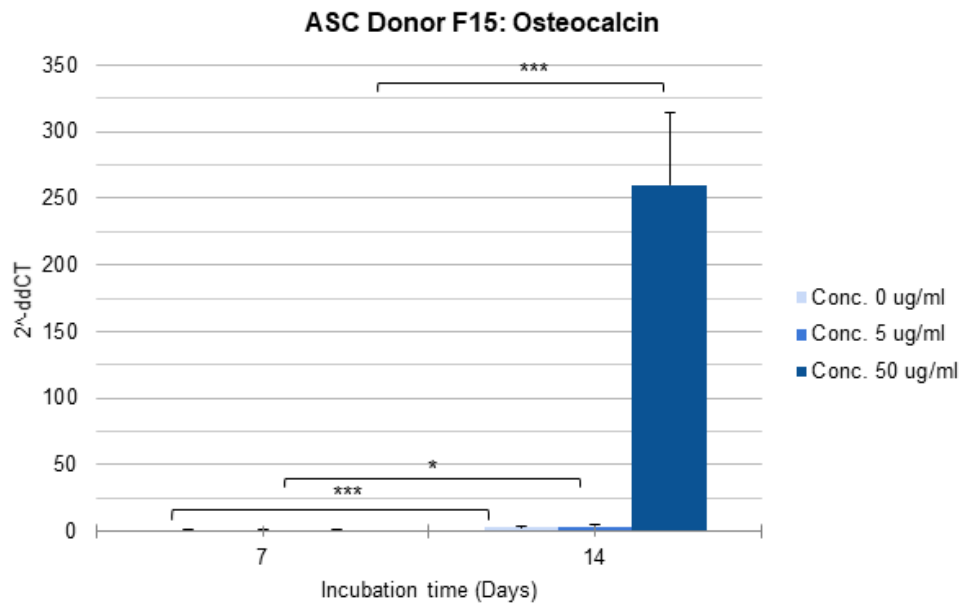
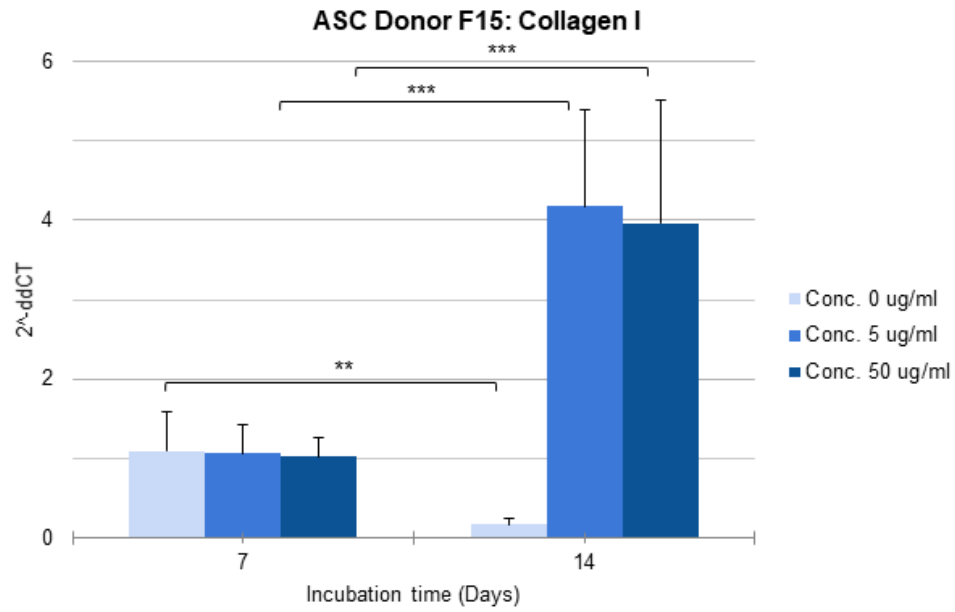


Figure S2. Average manifold induction of different genes for donor 2 (internal abbreviation F19). Experiments were carried out for three conditions and two time points, with 0, 5 or 50 ug/mL aCaP nanoparticles, denoted as Conc. = concentration and incubation for 7 or 14 days in culture, respectively.









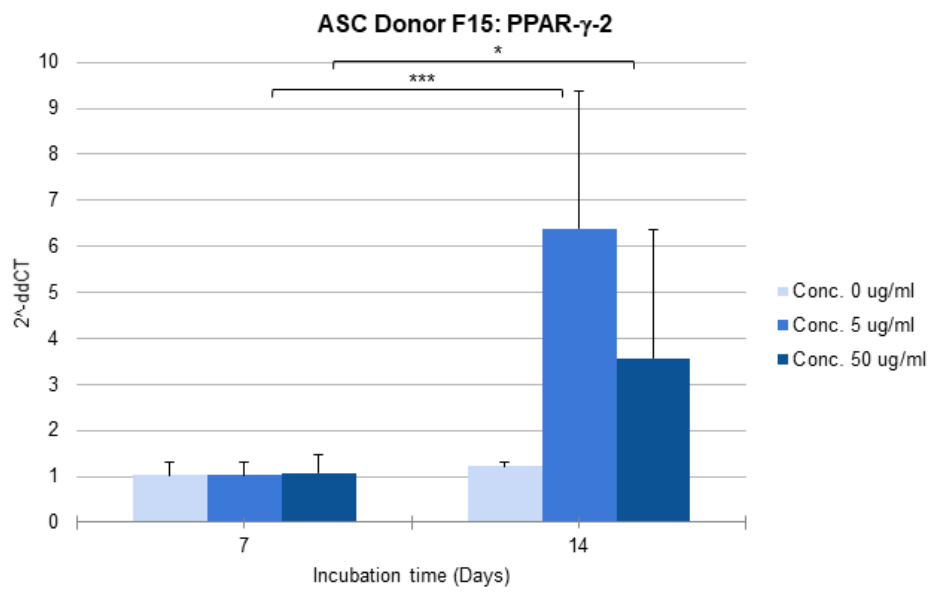
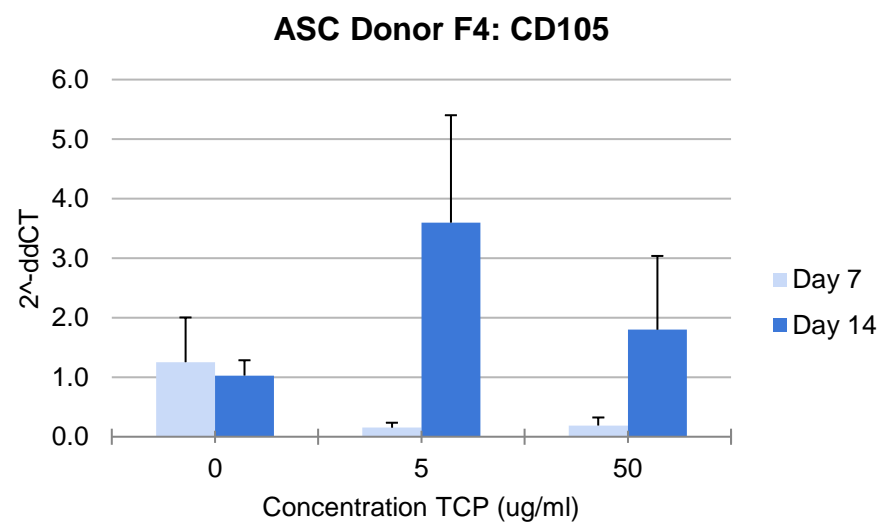
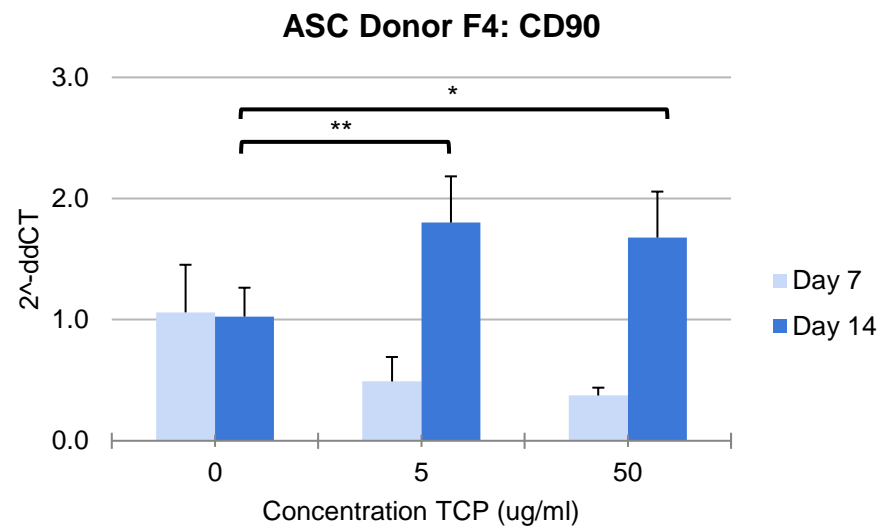
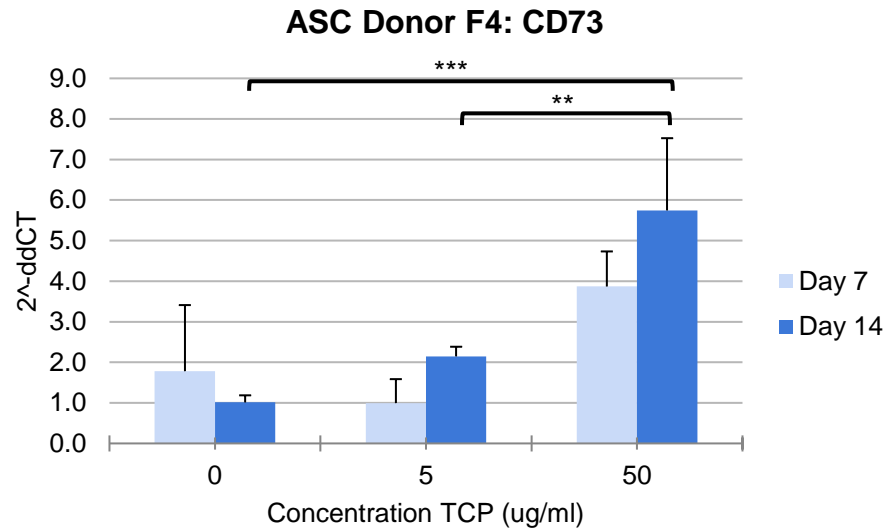
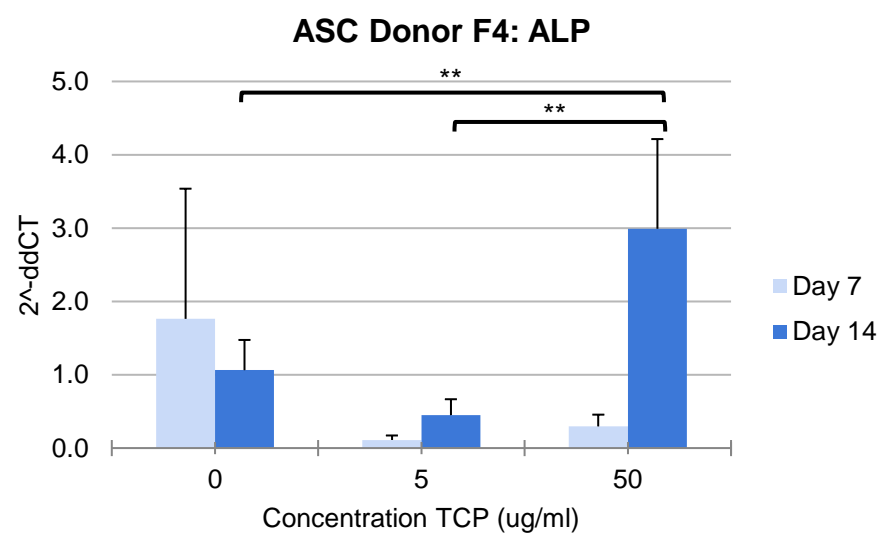
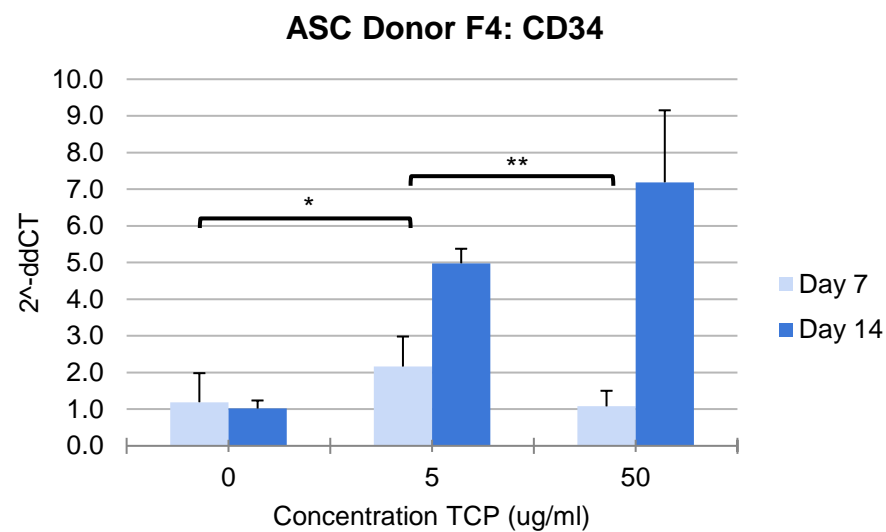
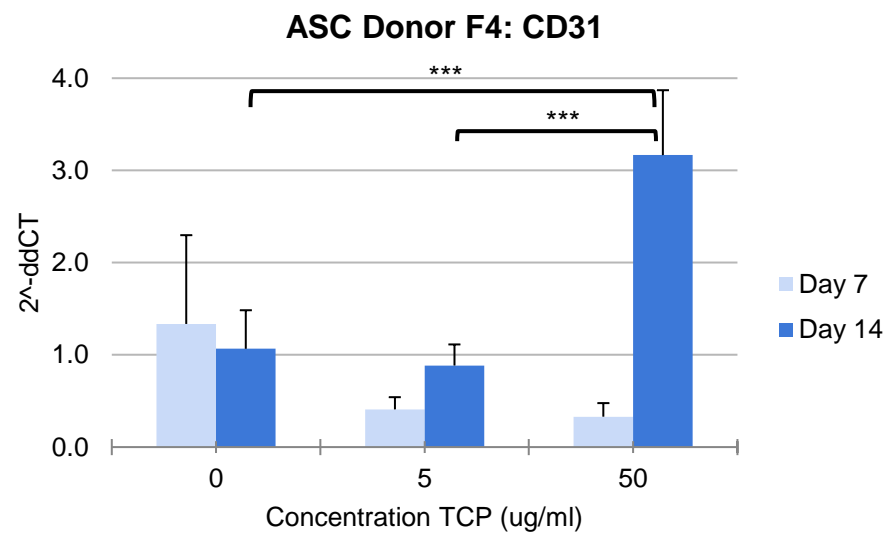
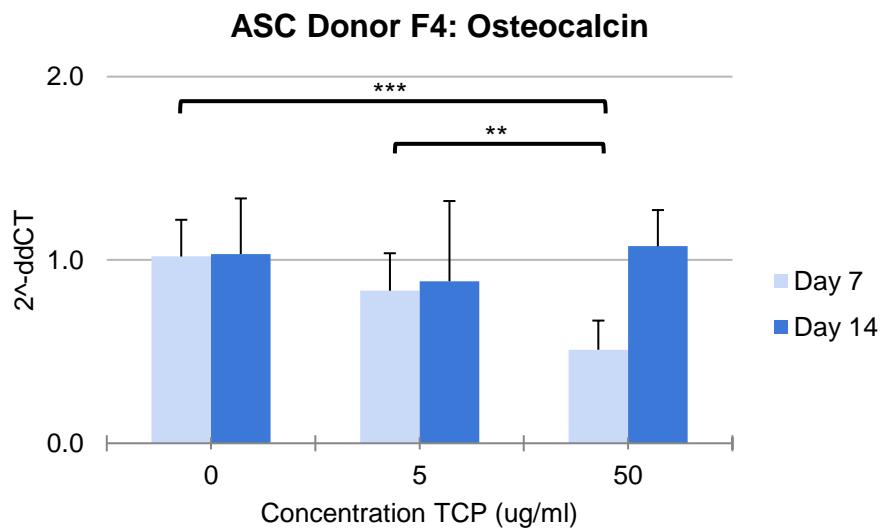
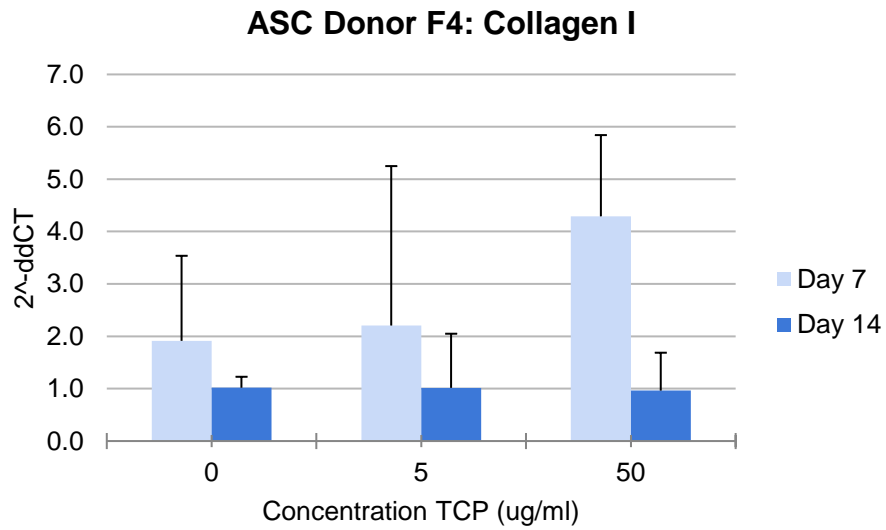
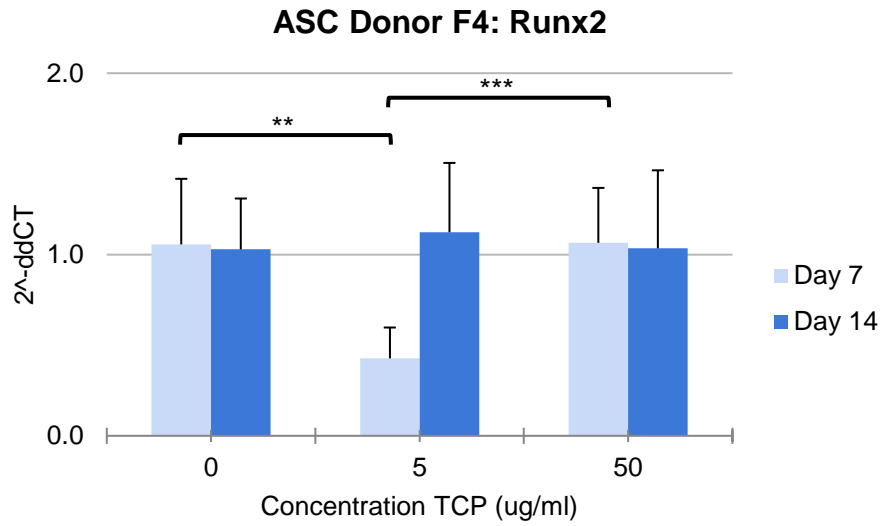


Figure S3. Average manifold induction of different genes for donor 3 (internal abbreviation F15). Experiments were carried out for three conditions and two time points, with 0, 5 or 50 ug/mL aCaP nanoparticles, denoted as Conc. = concentration and incubation for 7 or 14 days in culture, respectively.







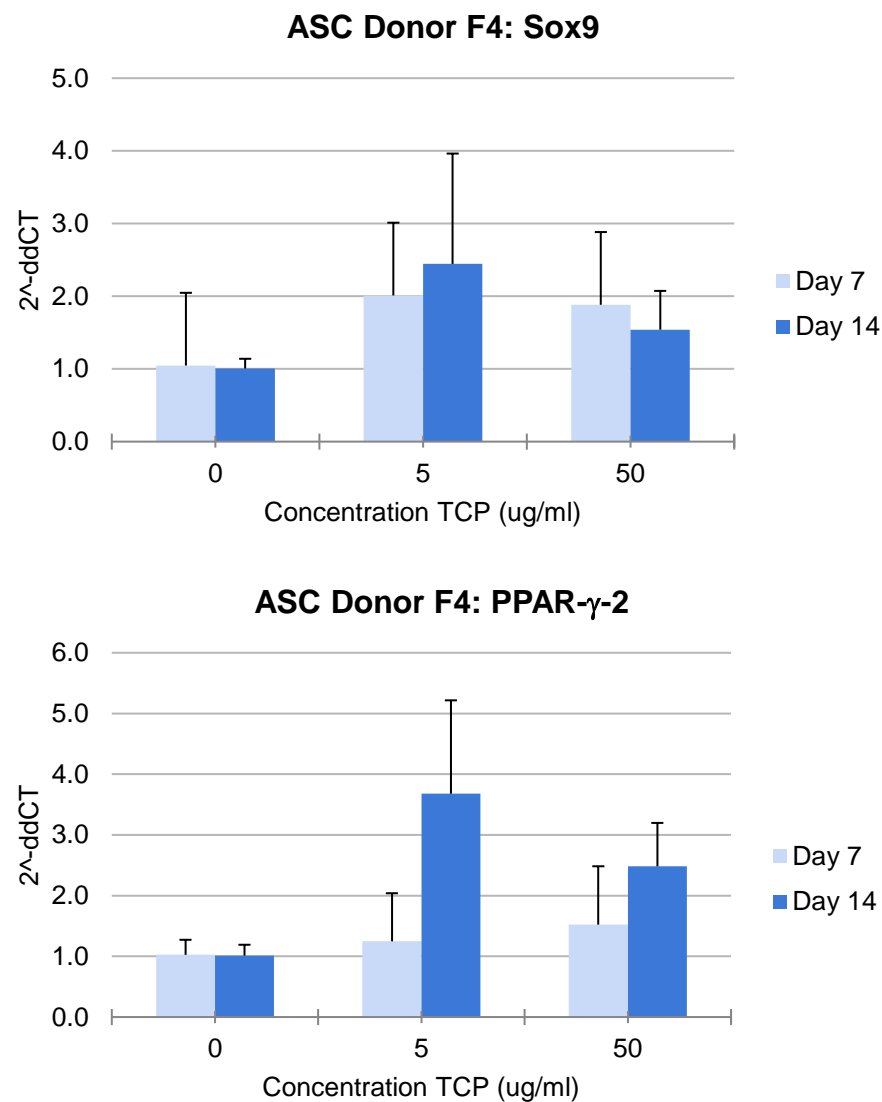
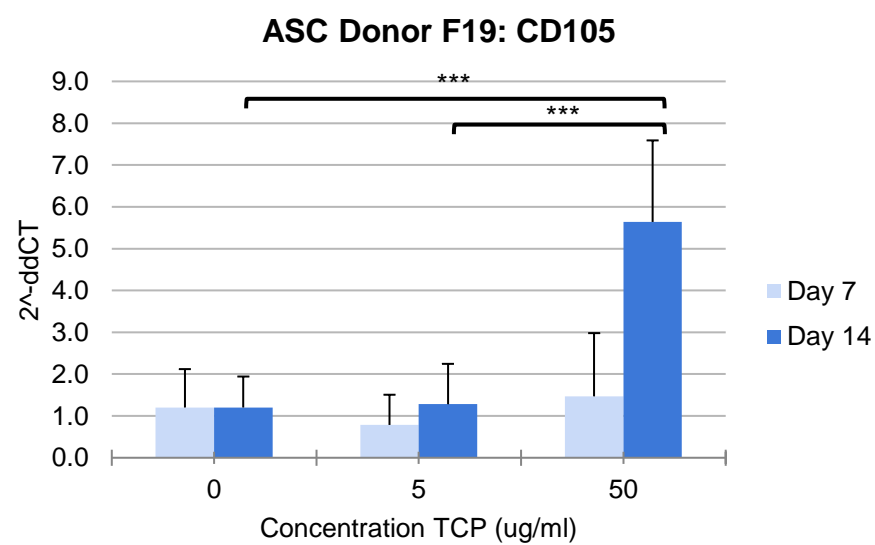
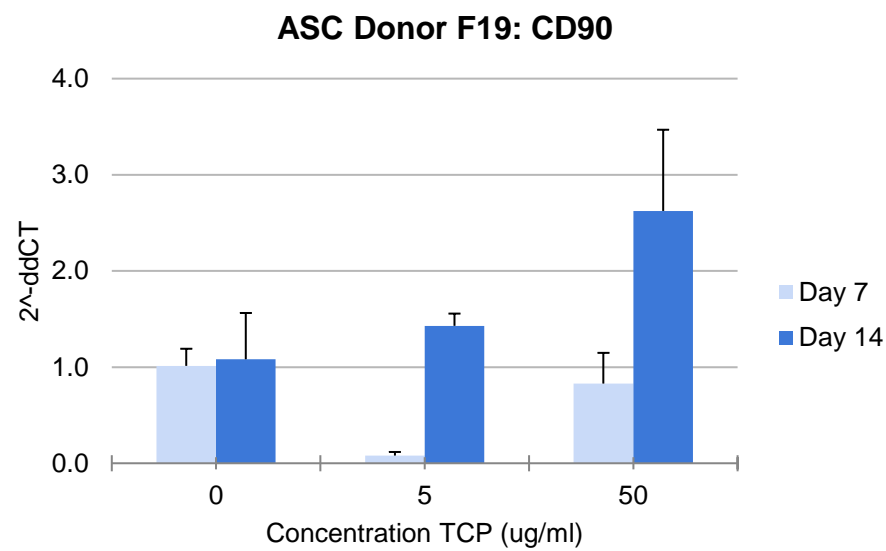
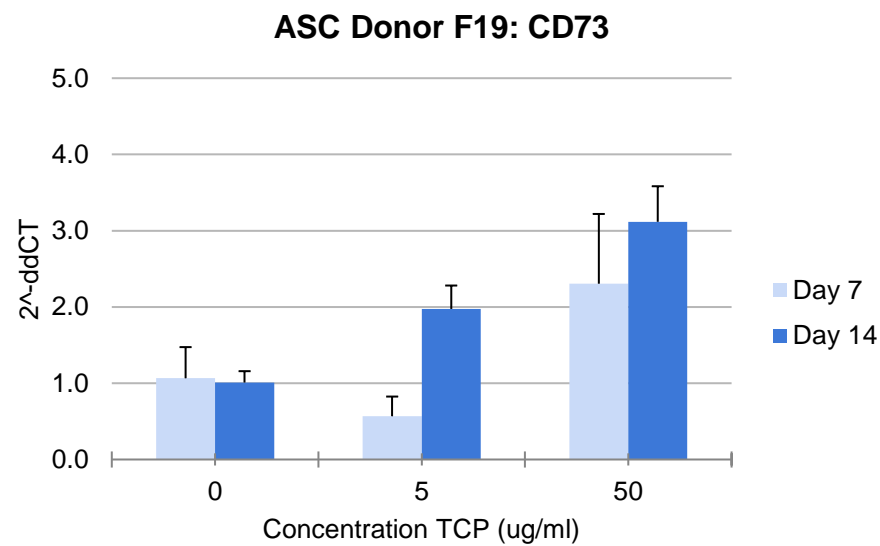
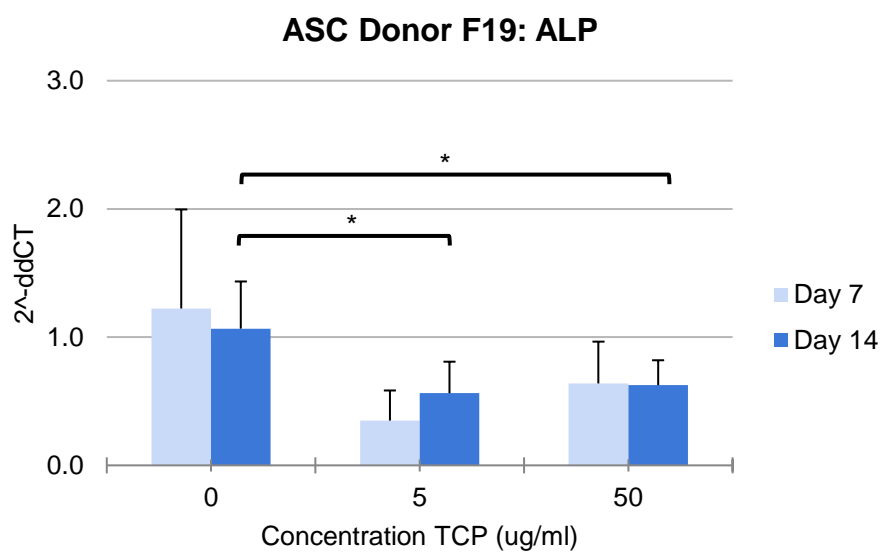
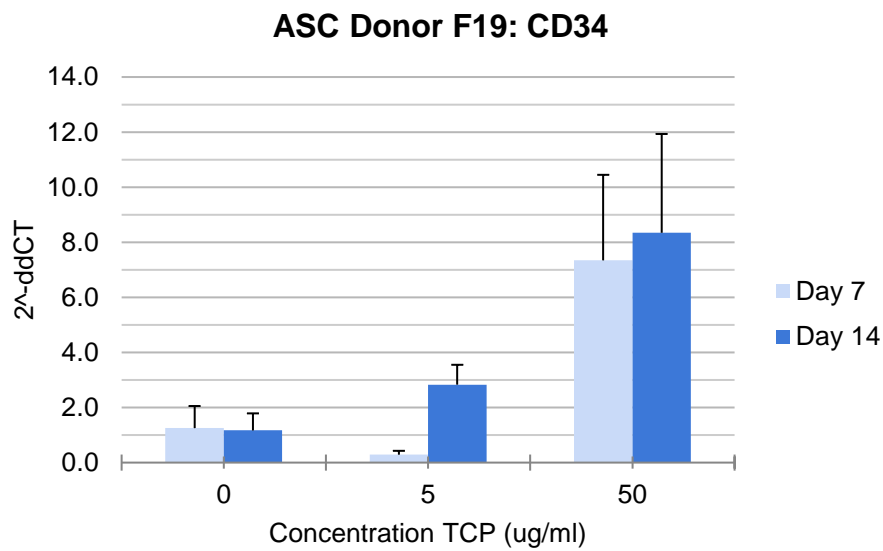
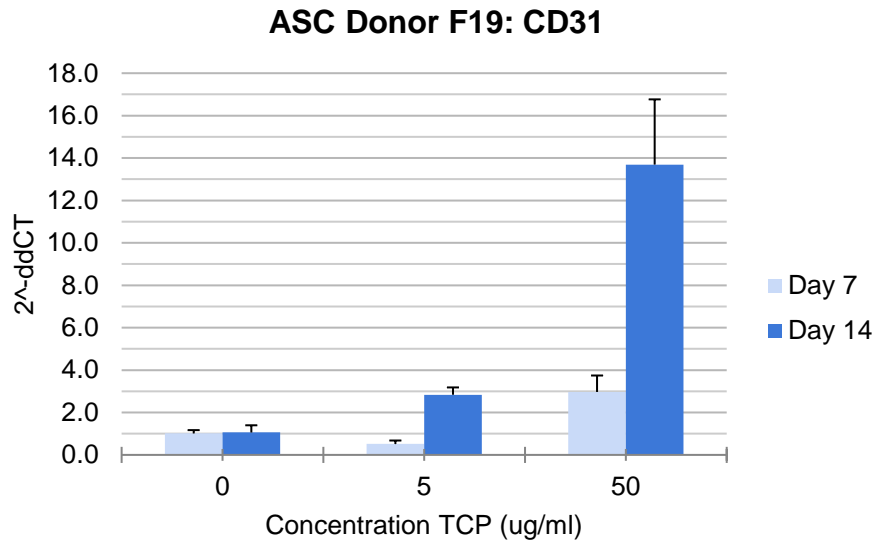
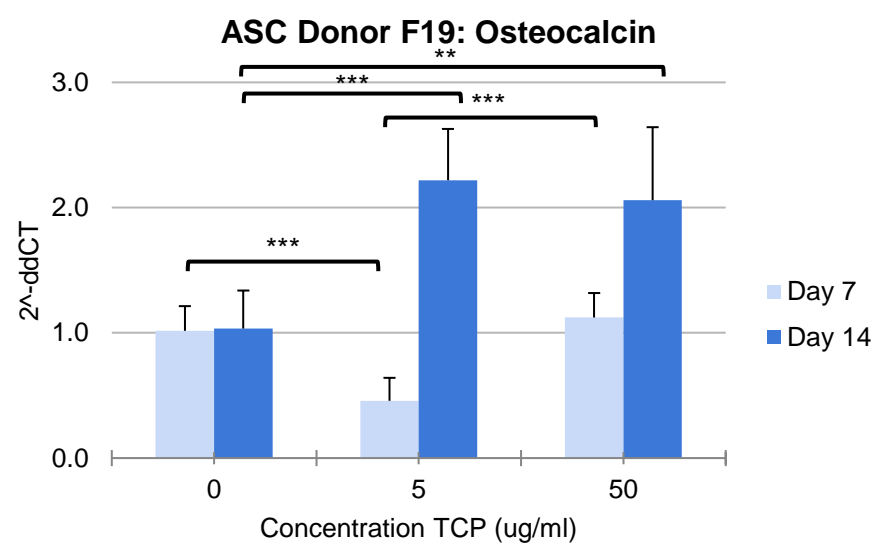
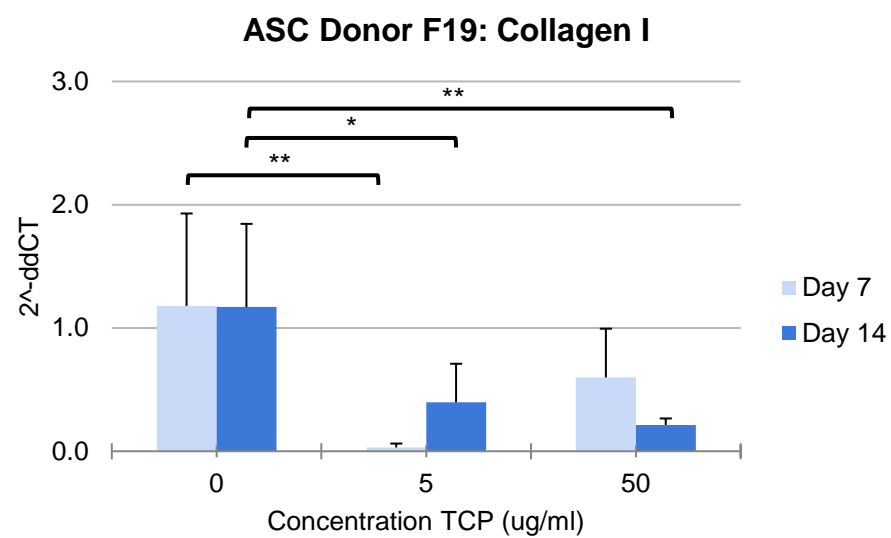
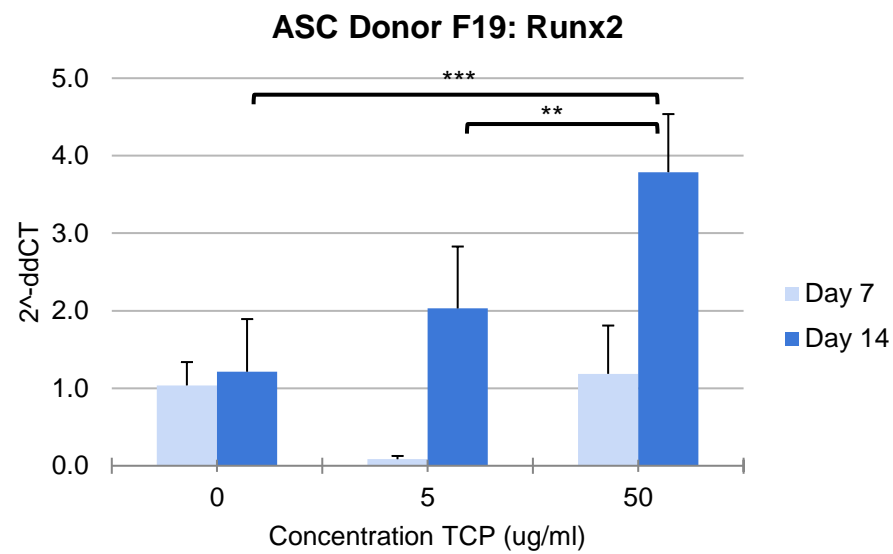


Figure S4. Average manifold induction of different genes for donor 1 (internal abbreviation F4). Experiments were carried out for three conditions and two time points, with 0, 5 or 50 ug/mL aCaP nanoparticles and at 7 or 14 days in culture, respectively. Key: TCP = amorphous calcium phosphate nanoparticles.







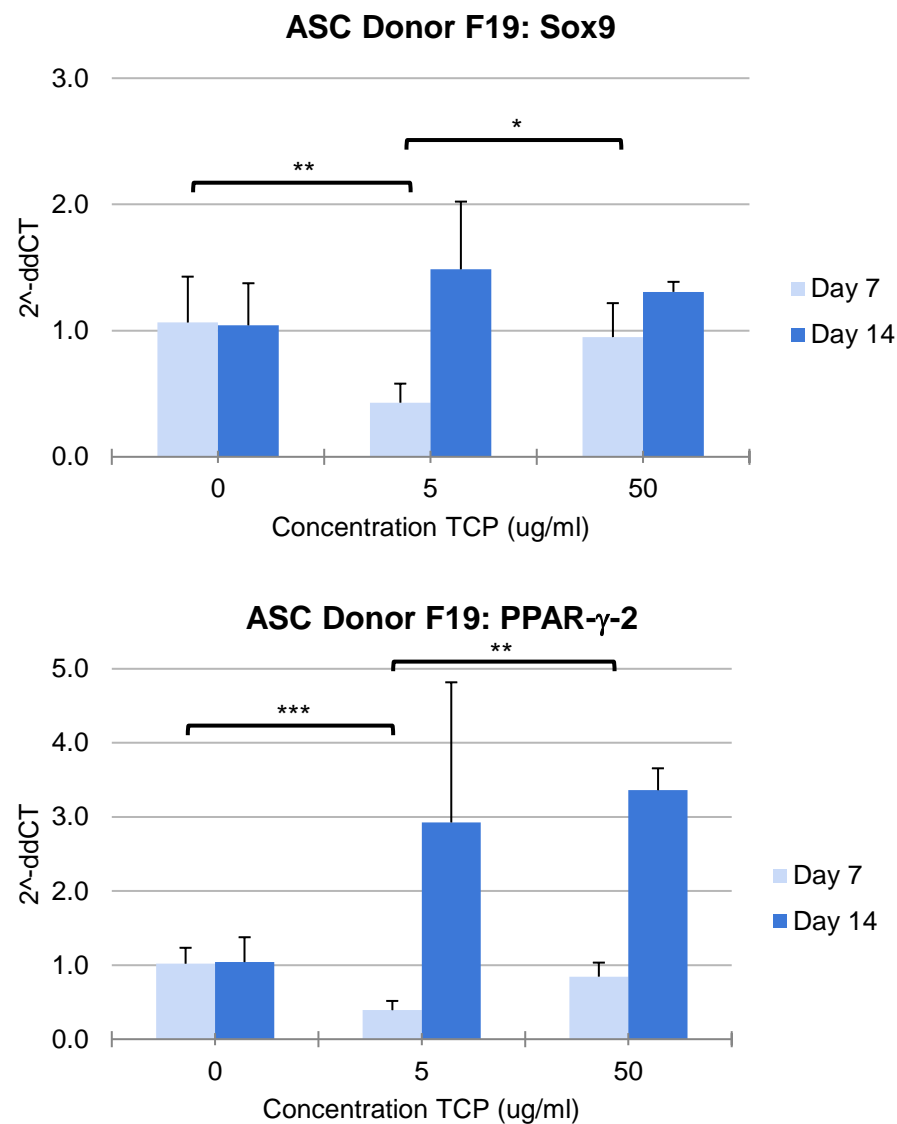
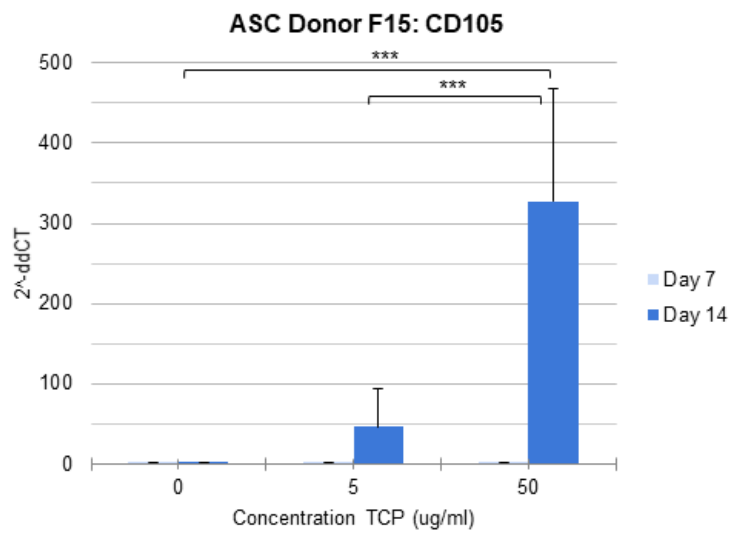
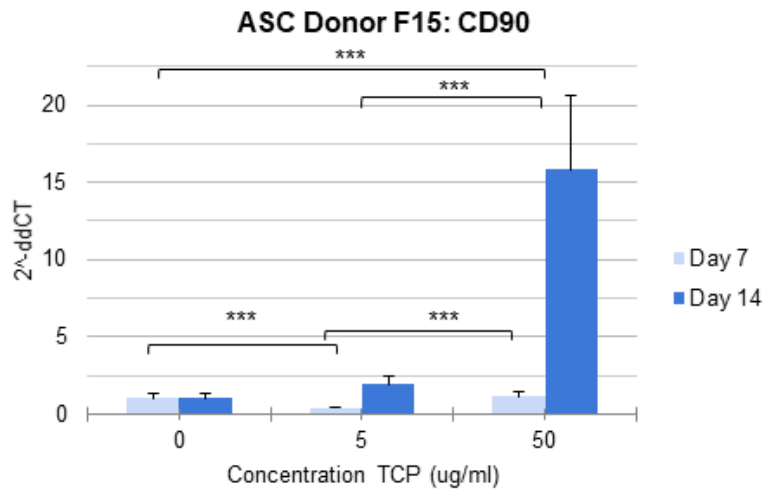
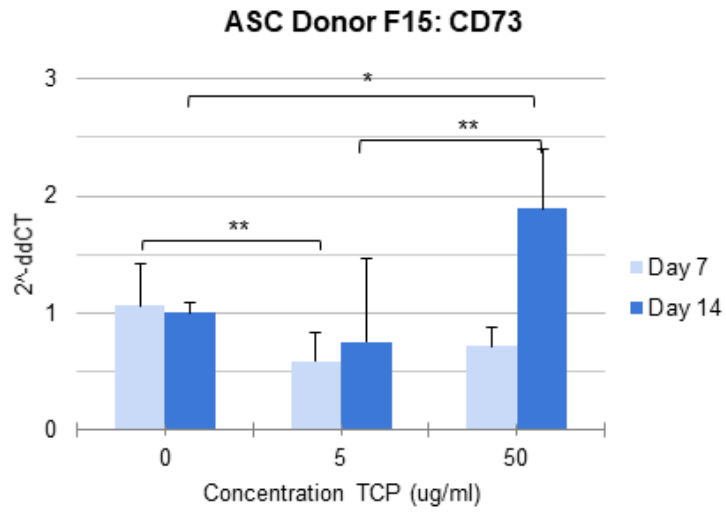
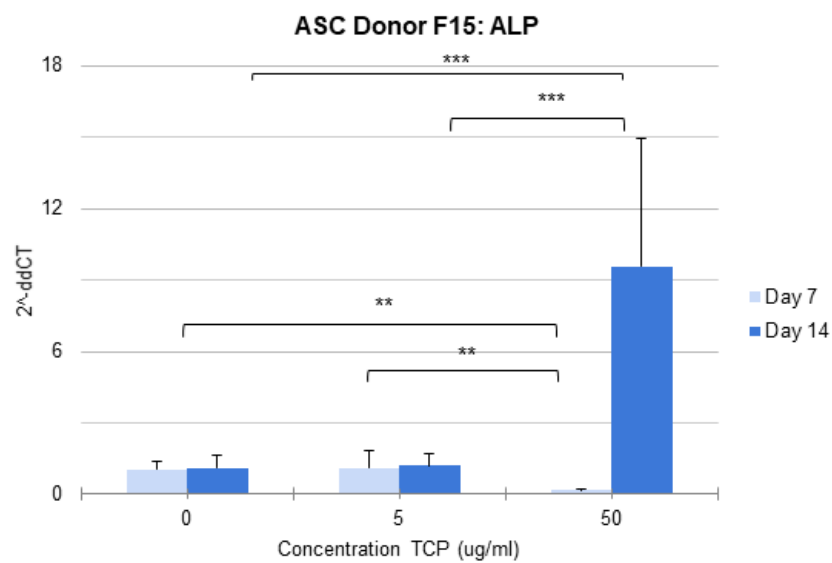
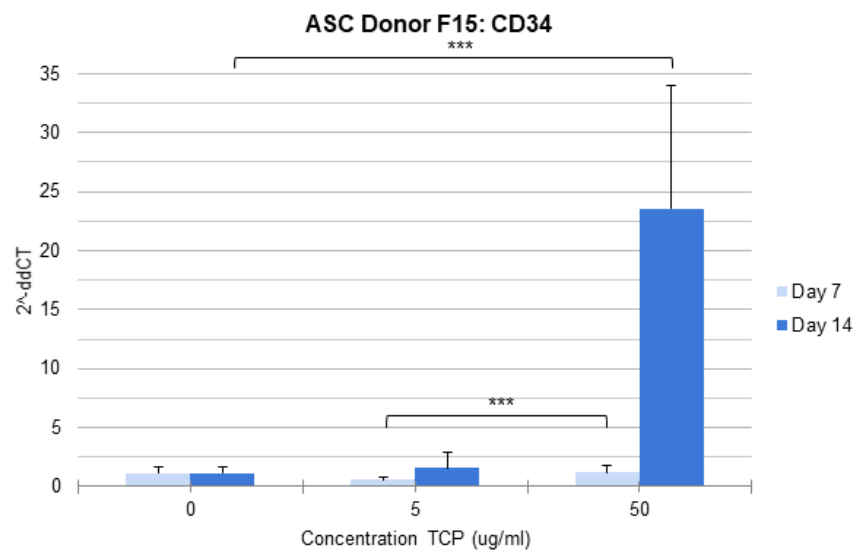
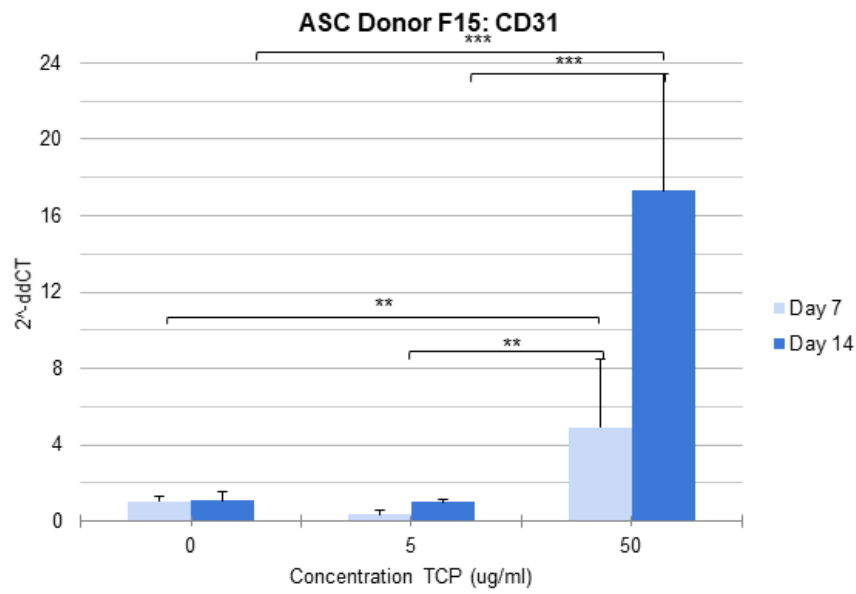
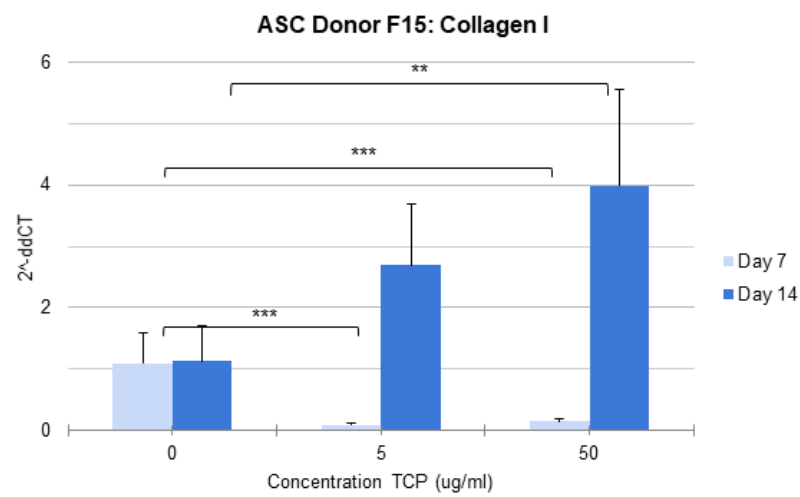
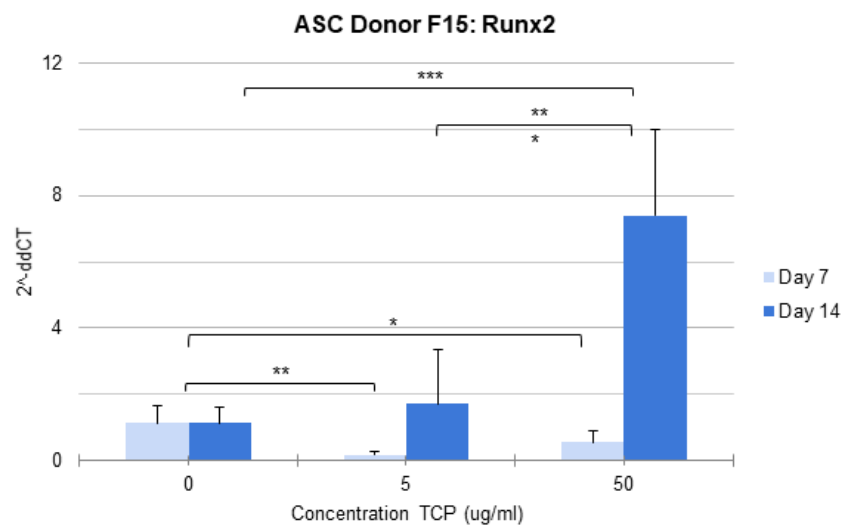
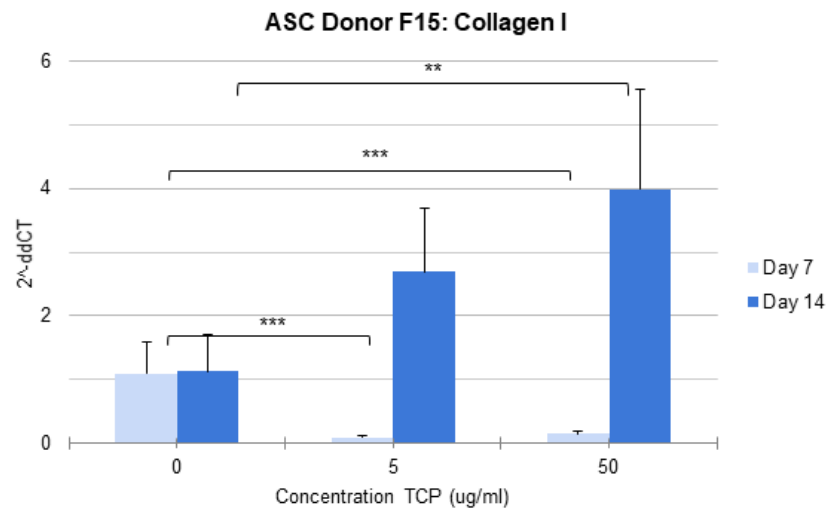


Figure S5. Average manifold induction of different genes for donor 2 (internal abbreviation F19). Experiments were carried out for three conditions and two time points, with 0, 5 or 50 ug/mL aCaP nanoparticles and at 7 or 14 days in culture, respectively. Key: TCP = amorphous calcium phosphate nanoparticles.







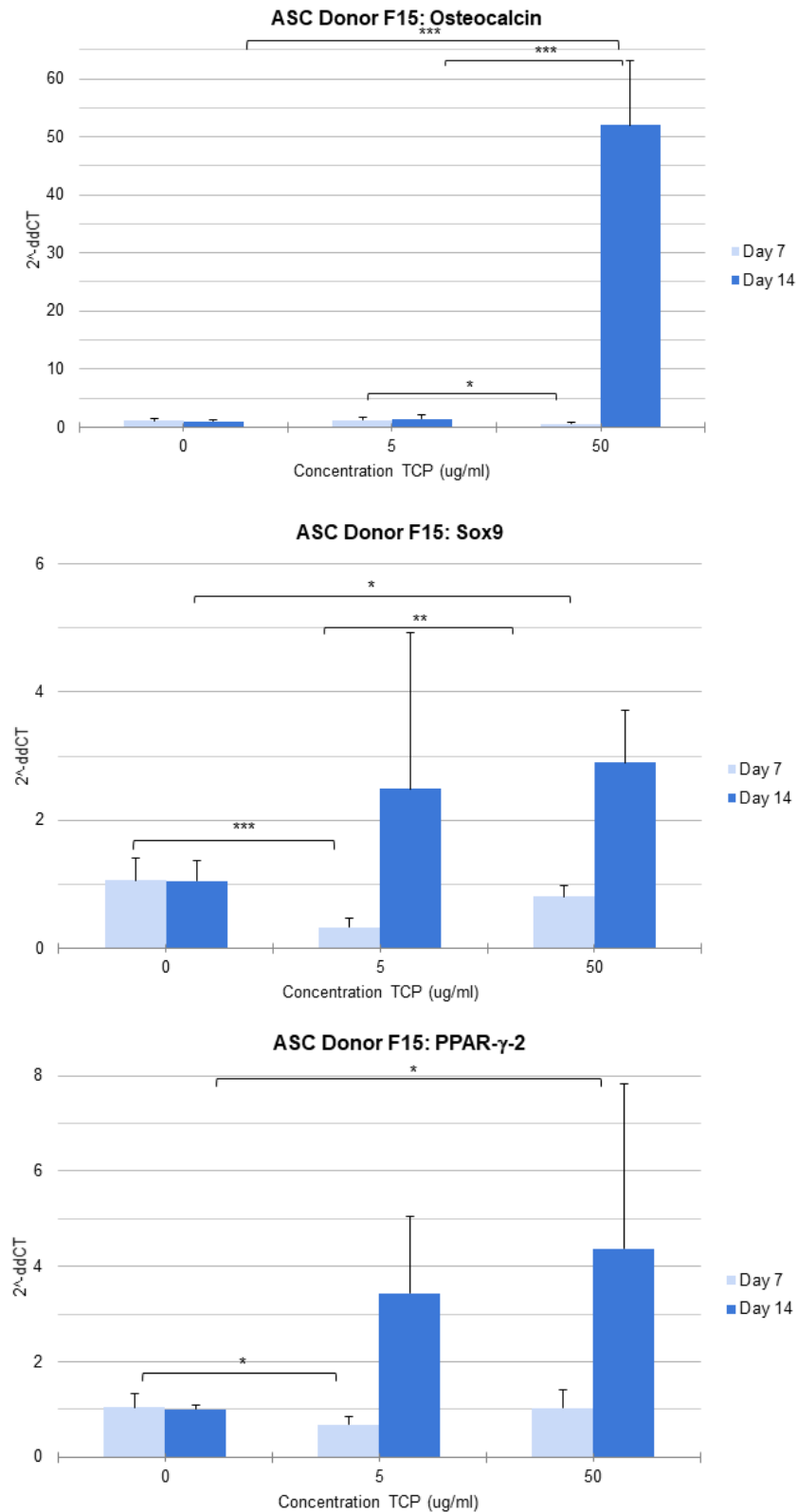


Figure S6. Average manifold induction of different genes for donor 3 (internal abbreviation F15). Experiments were carried out for three conditions and two time points, with 0, 5 or 50 ug/mL aCaP nanoparticles and at 7 or 14 days in culture, respectively. Key: TCP = amorphous calcium phosphate nanoparticles.

Table S1. The sequences of forward and reverse primers.

Gene		Sequence (5'-3')
GAPDH	forward	ACC ACA GTC CAT GCC ATC AC
	reverse	TCC ACC ACC CTG TTG CTG TA
CD31	forward	ATT GCA GTG GTT ATC ATC GGA
	reverse	CTC GTT GTT GG AGT TCA GAA GTG
CD34	forward	TGA AGC CTA GCC TGT CAC CT
	reverse	CGC ACA GCT GGA GGT CTT AT
CD73	forward	CTC CTC TCA ATC ATG CCG CT
	reverse	CCC AGG TAA TTG TGC CAT TGT
CD90	forward	TGA ATA CAG ACT GCA CCT CCC
	reverse	CTT GAC GGG TGA GGC TAG GA
CD105	forward	CAG CAG TGT CTT CCT GCA TC
	reverse	AGT TCC ACC TTC ACC GTC AC
ALP	forward	CTG GTA GTT GTT GTG AGC AT
	reverse	CCC AAA GGC TTC TTC TTG
Osteocalcin	forward	CAC TCC TCG CCC TAT TGG C
	reverse	CCC TCC TGC TTG GAC ACA AAG
Runx2	forward	GAA CCC AGA AGG CAC AGA CA
	reverse	GGC TCA GGT AGG AGG GCT
COL1	forward	TGA CGA GAC CAA GAA CTG
	reverse	CCA TCC AAA CCA CTG AAA CC
PPAR- α -2	forward	AGG AGC AGA GCA AAG AGG
	reverse	CCT CGG ATA TGA GAA CCC
Sox 9	forward	CTC TGG AGA CTT CTG AAC GAG
	reverse	GTT CTT CAC CGA CTT CCT CCG