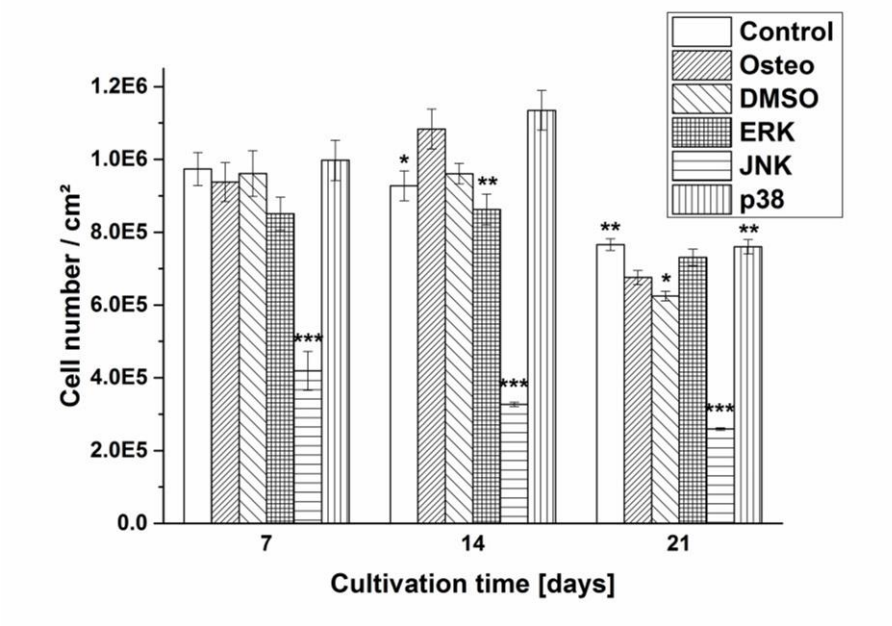
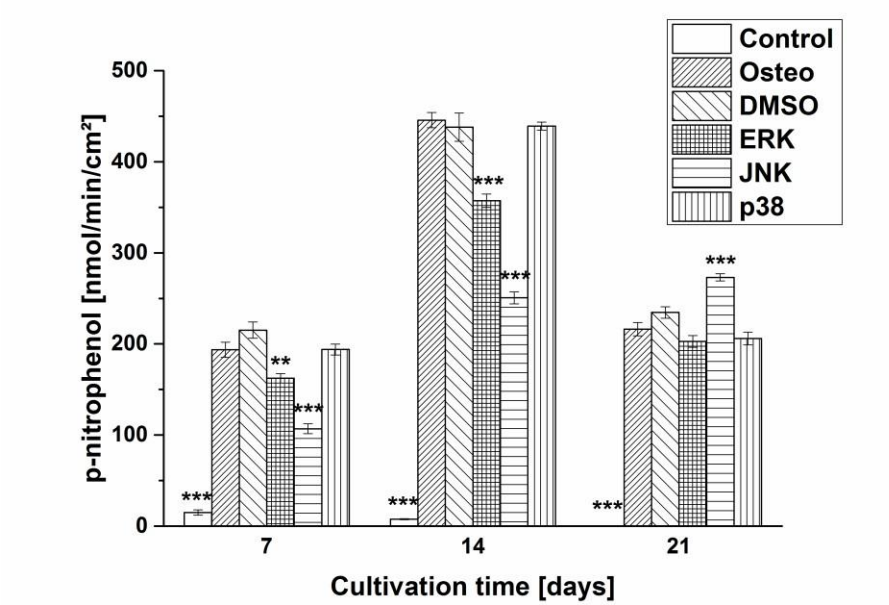
Supporting Information:

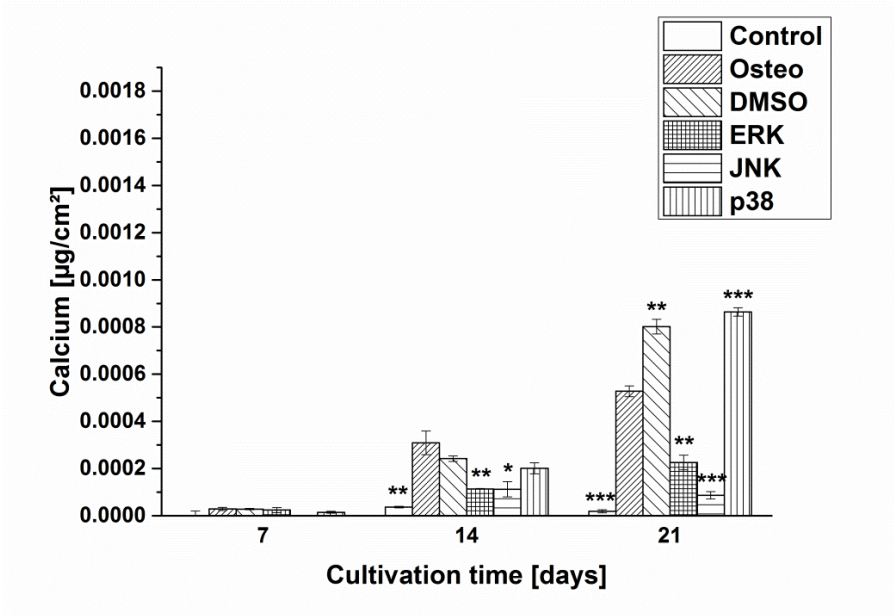
Supp. Figure 1A:



Supp. Figure 1B:



Supp. Figure 1C:



Supp. Table 1

Osterix	Runx2	pRunx2	ERK	pERK	BMP2	pSmad
18.48 ± 0.71***	17.01 ± 0.8	39.68 ± 1.33***	34.49 ± 1.98	29.49 ± 1.92***	7.89 ± 0.45***	53.55 ± 1.85***

Supp. Figure Legend 1:

Estimated cell behavior of hASCs cultivated in well plates via using the same media reagents as for the Ti flat and lotus topography measurements. Additionally, control cells were used. An average cell density of 1.8×10^4 cells per treatment was seeded out. The results were averaged ± SEM and obtained from three independent measurements. Student's-t-test was applied ($p < 0.05$, $p < 0.01$, $p < 0.001$) to estimate significant with the osteogenic setup (*). (A) proliferation profile via LDH assay [cell number/cm²]; (B) quantification of ALP activity via p-nitrophenol [nmol/mg protein]; (C) calcium mineralization [µg/cm²].

Supp. Table Legend 1:

Analysis of p38 inhibition on hASCs cultivated in a well plate: impact on the transcription factors, and signaling pathways of ERK-pERK and BMP2-pSmad after 3 days cultivation time. Quantification of the relative fluorescence intensities obtained from 100 cells per treatment, given as average ± SEM.