

## Electronic Supplementary Information

### **Attapulgite-doped electrospun poly(lactic-co-glycolic acid) nanofibers enable enhanced osteogenic differentiation of human mesenchymal stem cells**

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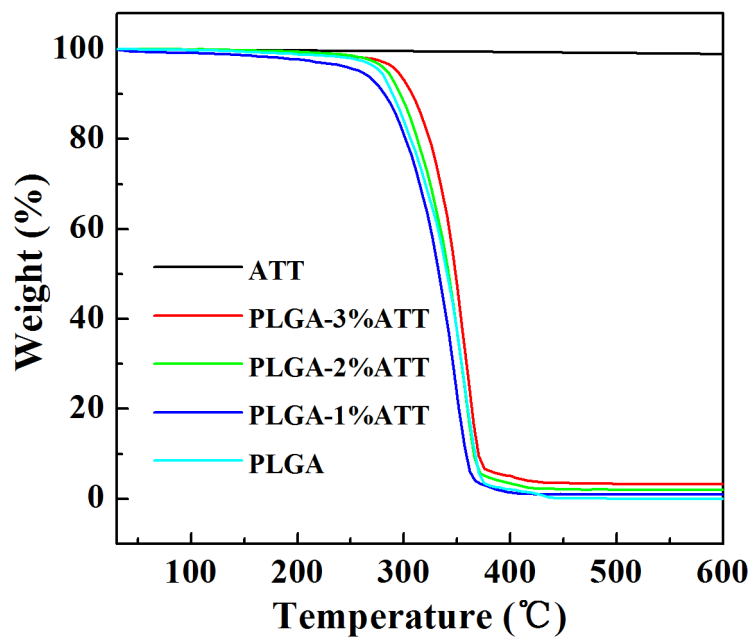
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**Table S1.** Bulk density, apparent density, porosity, and water contact angle of PLGA and ATT-doped PLGA nanofibers.

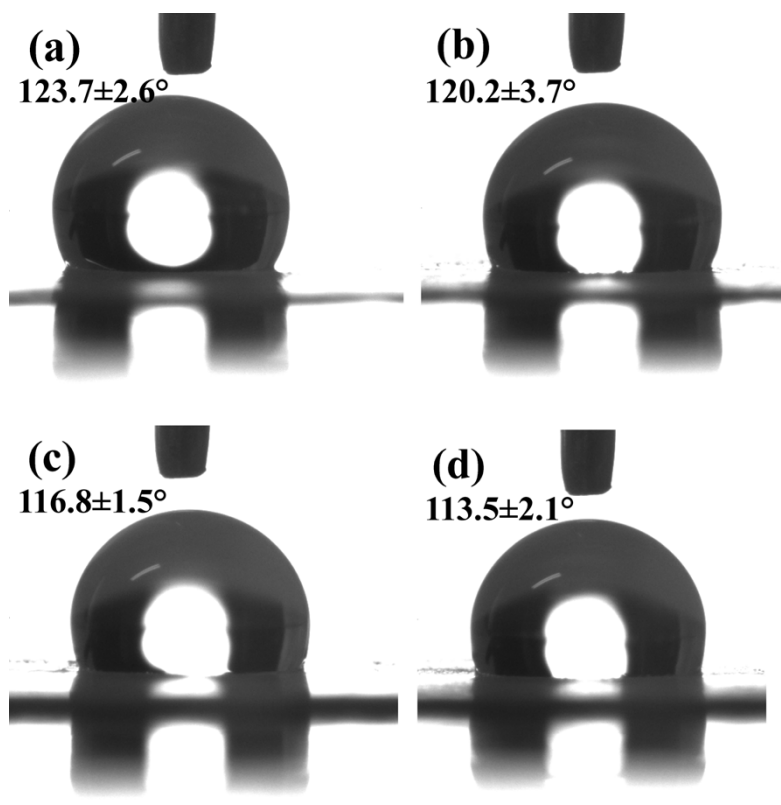
Samples	Bulk density (g cm <sup>-3</sup> )	Apparent density (g cm <sup>-3</sup> )	Porosity (%)	Water contact angle (°)
PLGA	1.250	0.350±0.013	72.00±1.04	123.7±2.6
PLGA-1%ATT	1.255	0.403±0.028	67.75±2.24	120.2±3.7
PLGA-2%ATT	1.261	0.412±0.047	67.04±3.76	116.8±1.5
PLGA-3%ATT	1.266	0.422±0.029	66.24±2.32	113.5±2.1

**Table S2.** Hemolysis percentage (HP) of PLGA and ATT-doped PLGA nanofibers (all data are given as mean ± SD, n=3).

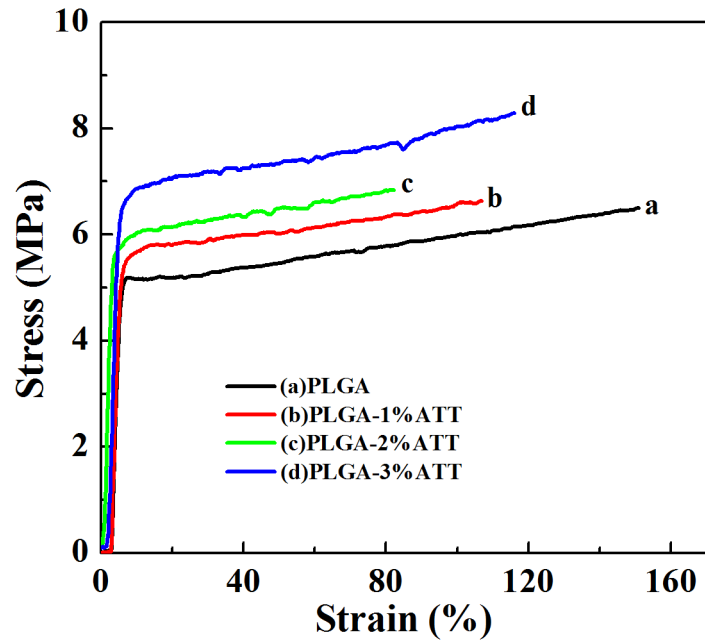
Samples	PLGA	PLGA-1%ATT	PLGA-2%ATT	PLGA-3%ATT
HP (%)	1.2±0.1	0.64±0.13	0.65±0.09	0.56±0.21



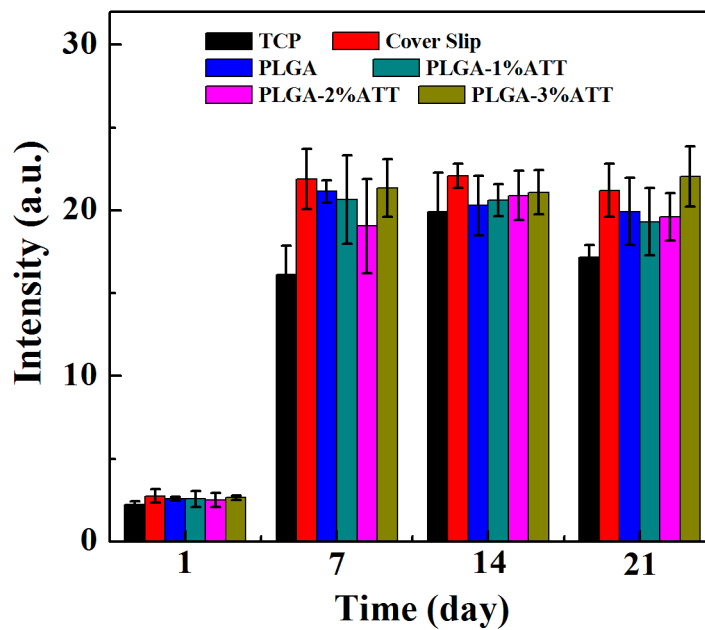
**Figure S1.** TGA curves of ATT nanorods, and PLGA and ATT-doped PLGA nanofibers with different ATT doping levels.



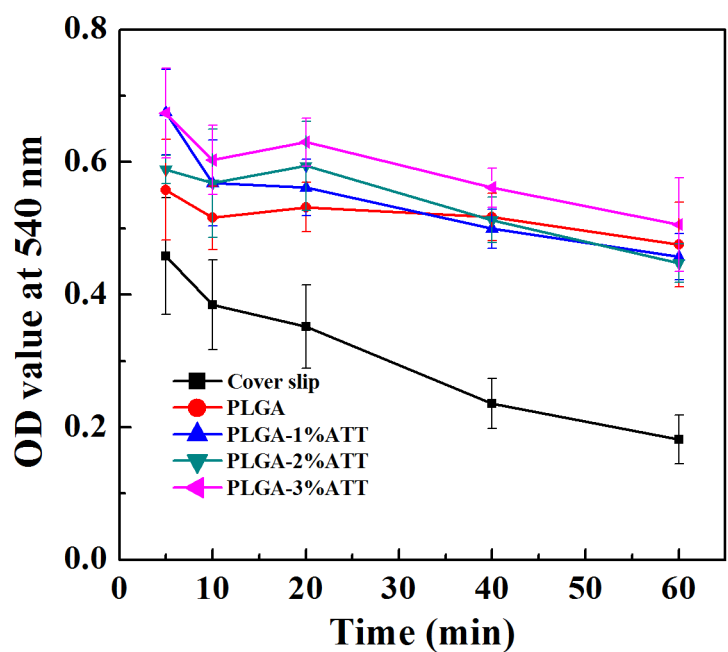
**Figure S2.** Water contact angles of PLGA (a), PLGA-1%ATT (b), PLGA-2%ATT (c), and PLGA-3%ATT (d) fibrous mats.



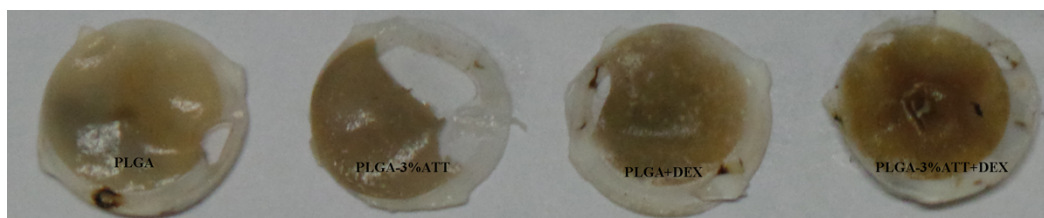
**Figure S3.** Strain-stress curves of PLGA (a), PLGA-1%ATT (b), PLGA-2%ATT (c), and PLGA-3%ATT (d) nanofibrous mats.



**Figure S4.** Metabolic activity assay of hMSCs cultured onto TCP, cover slip, PLGA, PLGA-1%ATT, PLGA-2%ATT, and PLGA-3%ATT nanofibers at different culture times.



**Figure S5.** Anticoagulant assay of PLGA and ATT-doped PLGA nanofibers at different time intervals.



**Figure S6.** The picture of von Kossa staining of hMSCs cultured onto PLGA and PLGA-3%ATT nanofibers in growth medium (without DEX) and osteogenic medium (with DEX) on day 21.