

Support Information

ECM Decorated Electrospun Nanofiber for Improving Bone Tissue Regeneration

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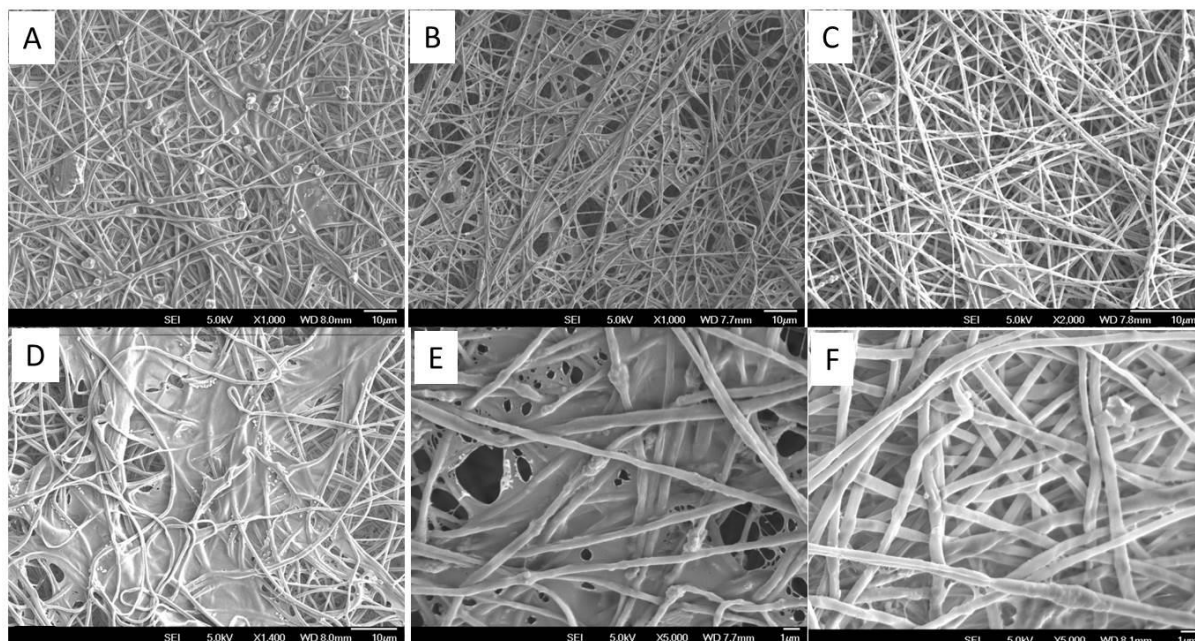


Figure S1. ECM/PLLA electrospun nanofibers after SDS treatment for different time period: A) 30 min, low mag B) 60 min, low mag C) Over night, low mag D) 30min, high mag ; E) 60 min, high mag, F) Over night, High mag.

MC3T3-E1 cell derived ECM was treated with 1%SDS for different time periods. When only treated for 30 min, the layer of ECM almost maintained its integrity, indicating that such short time treatment was not able to remove all the cellular components from the cells. MC3T3-E1 cell deposited ECM was then treated by SDS for 60 min, in turn we found that SDS already started to break down the structural component of the cells, but the ECM layer still covered the majority of the surface. When SDS treatment time was extended to overnight, it was observed that the whole layer of ECM was destroyed and no visible membrane can be seen under SEM. In summary, 60 min of decellularization with 1% SDS was chosen as the optimal condition for ECM preparation.



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