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**Assembling of hydrophilic and cytocompatible three-dimensional scaffolds
based on aminolyzed poly(L-lactide) single crystals**

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Table S1. Thermal properties of PLLA_{sc} and APLLA_{sc} determined by DSC.

Sample	T_{m1} (°C)	T_{m2} (°C)	T_c (°C)	ΔH (J/g)	X_c (%)
PLLA _{sc}	166.3	181.8	170.2	71.4	76.7
APLLA _{sc}	164.7	174.7	167.6	69.84	75.1

Table S2. The compressive mechanical properties and porosities of the scaffolds

Scaffolds	Compressive Modulus (MPa)		Compressive Strength (MPa)		Porosity (%)	
	E_{dry}	E_{wet}	σ_{dry}	σ_{wet}	p_t	p_o
PLLA _{sc}	13.53 ± 0.32	12.39 ± 0.45	0.36 ± 0.06	0.29 ± 0.09	79.45	78.85
APLLA _{sc}	9.22 ± 0.43	7.94 ± 0.73	0.23 ± 0.02	0.19 ± 0.03	79.74	78.93
PLLA _{sc} :APLLA _{sc} (40:60 wt%)	12.40 ± 0.50	11.77 ± 0.62	0.29 ± 0.09	0.22 ± 0.05	79.60	78.91

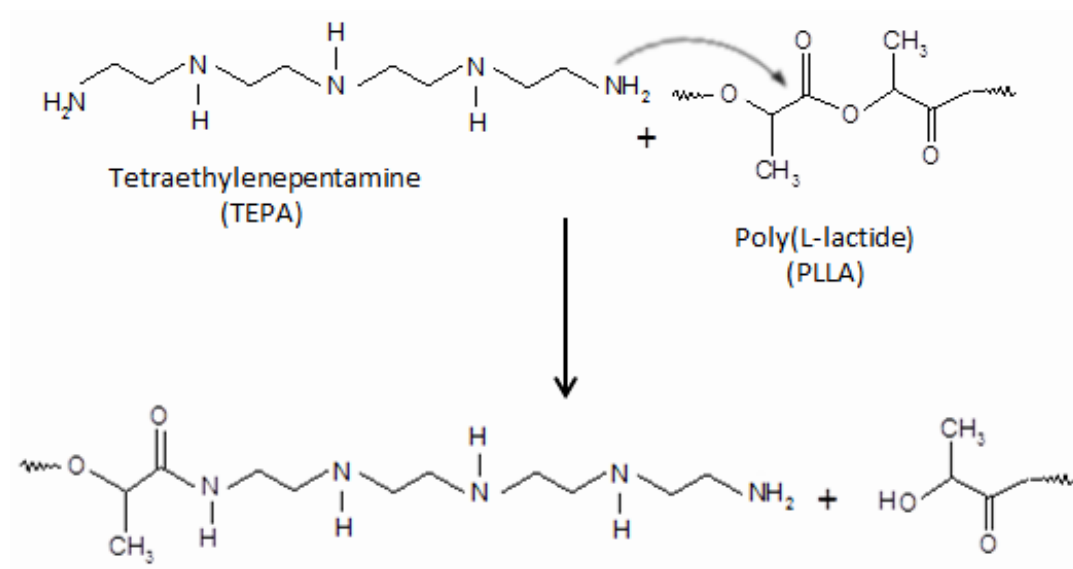


Fig. S1 Schematic representation for aminolysis reaction of poly(L-lactide) with Tetraethylenepentamine (TEPA)

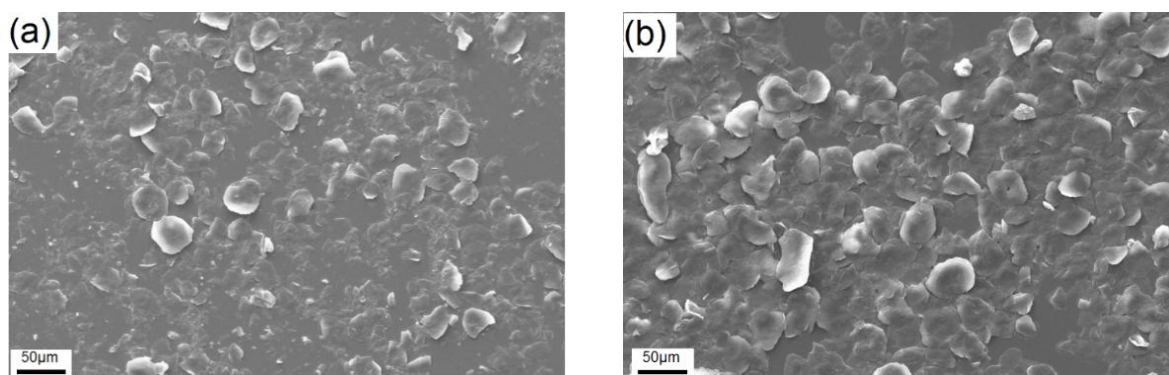


Fig. S2 The scanning electron micrographs of (a) PLLA_{SC} and (b) APLLA_{SC}.

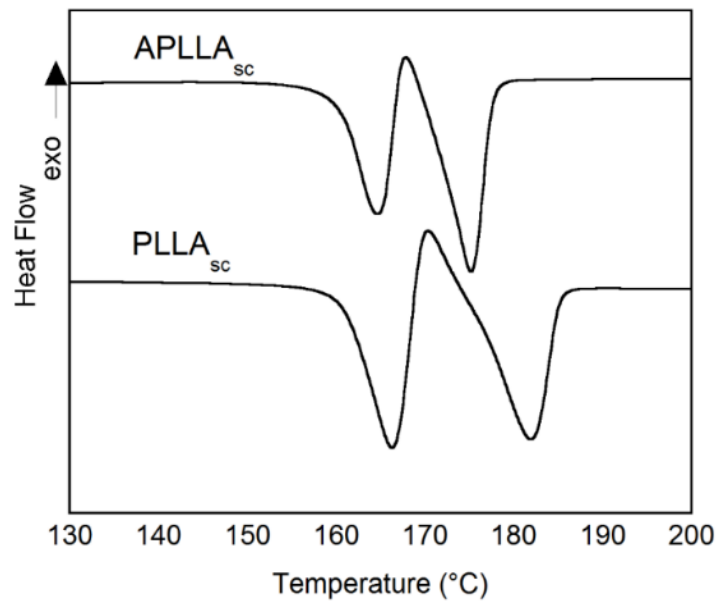


Fig. S3 The DSC profiles of pristine $PLLA_{sc}$ and $APLLA_{sc}$.

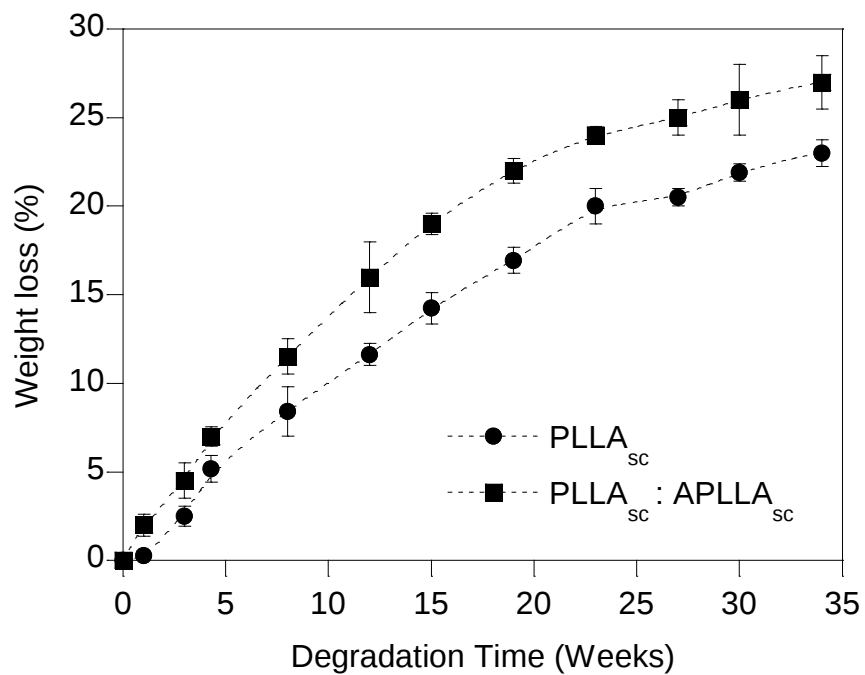


Fig. S4 Weight loss of $PLLA_{sc}$ and $PLLA_{sc}:APLLA_{sc}$ (40:60 wt%) scaffolds as a function of degradation time, reported as mean value $\pm$ SD. (n = 5).