

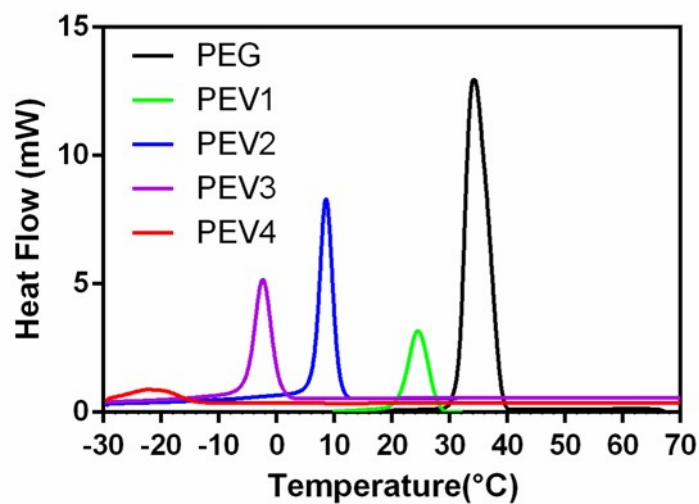
## Supporting information for “Self-assembled PEG-poly(L-valine) hydrogels as promising 3D cell culture scaffolds”

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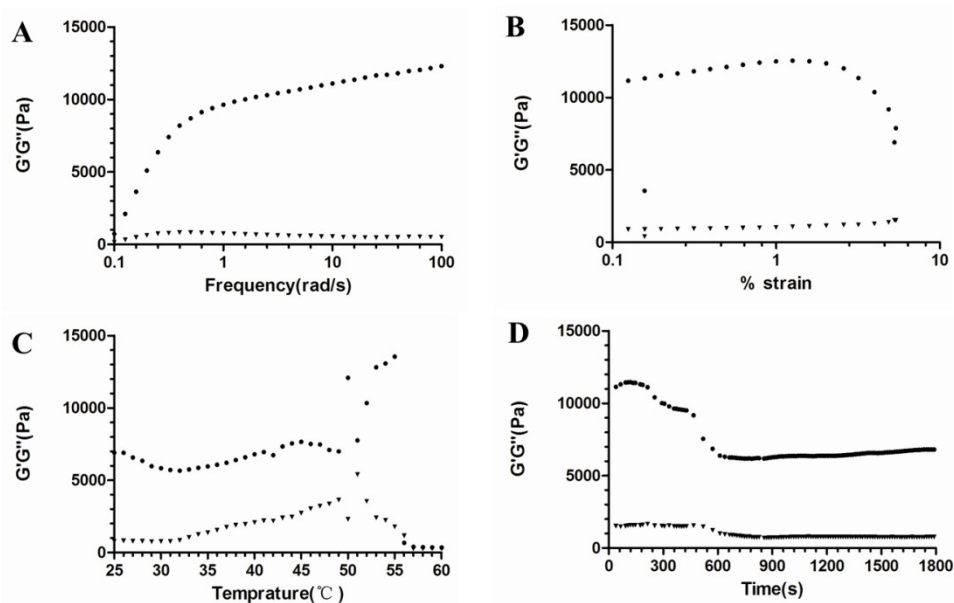
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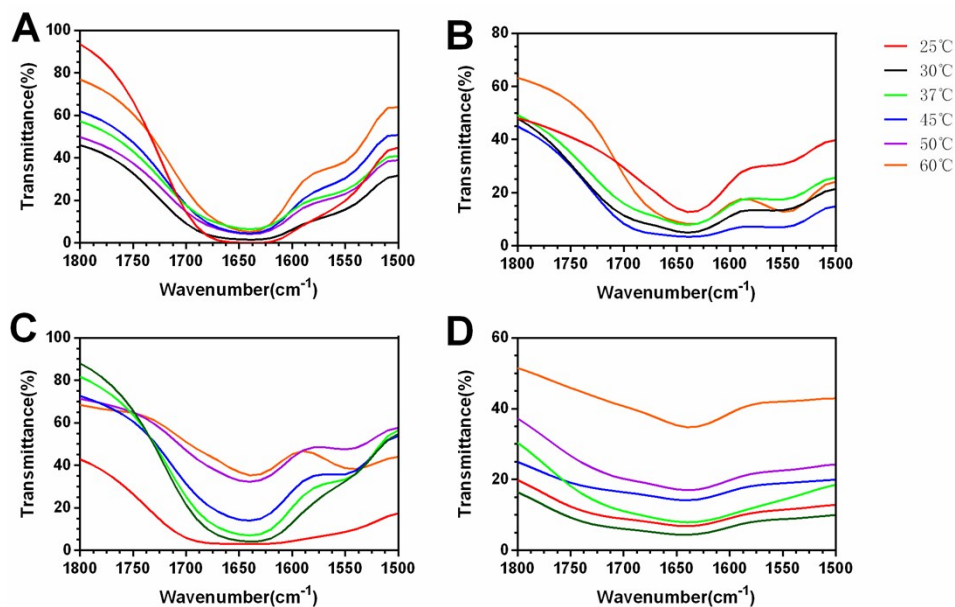
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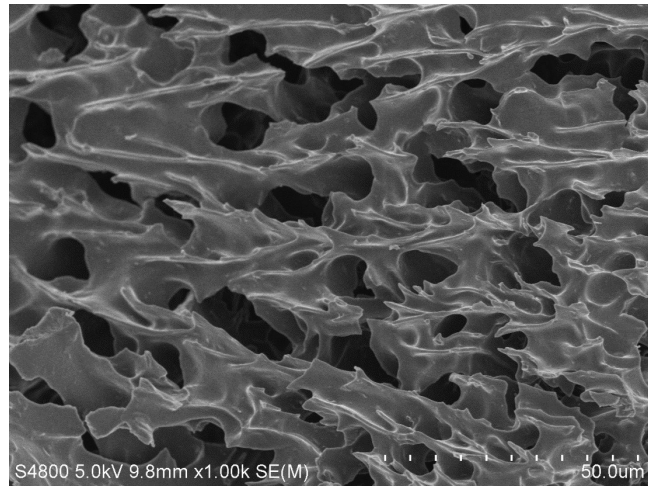
**Fig. S1** DSC curves of PEV copolymers recorded during the cooling stage. The cooling rate was 3 °C/min.



**Fig. S2** The storage modulus ( $G'$ ) and loss modulus ( $G''$ ) change in response to angular frequency (0-100 rad/s, A; shear strain, 1%; temperature, 25 °C), shear strain (0-10%, B; angular frequency, 1 rad/s; temperature, 25 °C), temperature (25-60 °C, C) and culture time (0-30 min, D). The angular frequency and strain were set at 1 rad/s and 1%, respectively.



**Fig. S3** FT-IR spectra of PEV hydrogels at a polymer concentration of 200 mg/mL as a function of temperature. (A, PEV-1; B, PEV-2; C, PEV-3; D, PEV-4)



**Fig. S4** The representative SEM image of PEV-3 hydrogel.