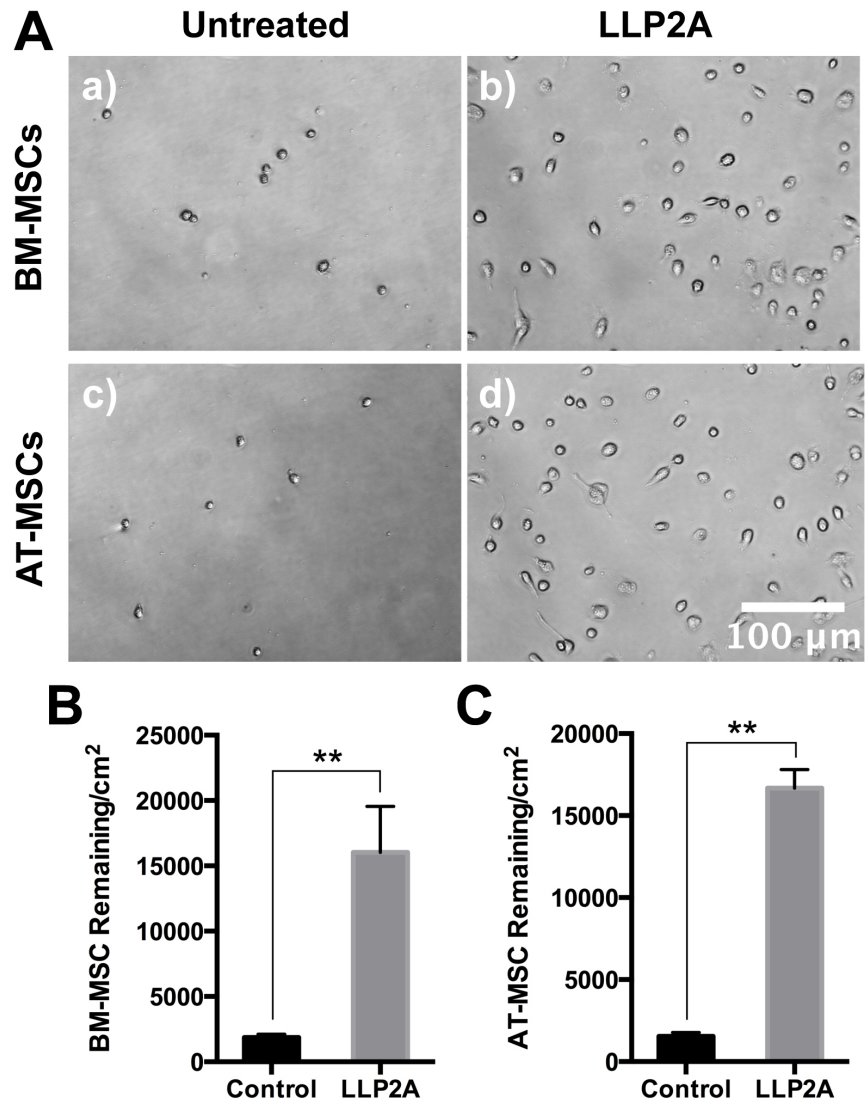
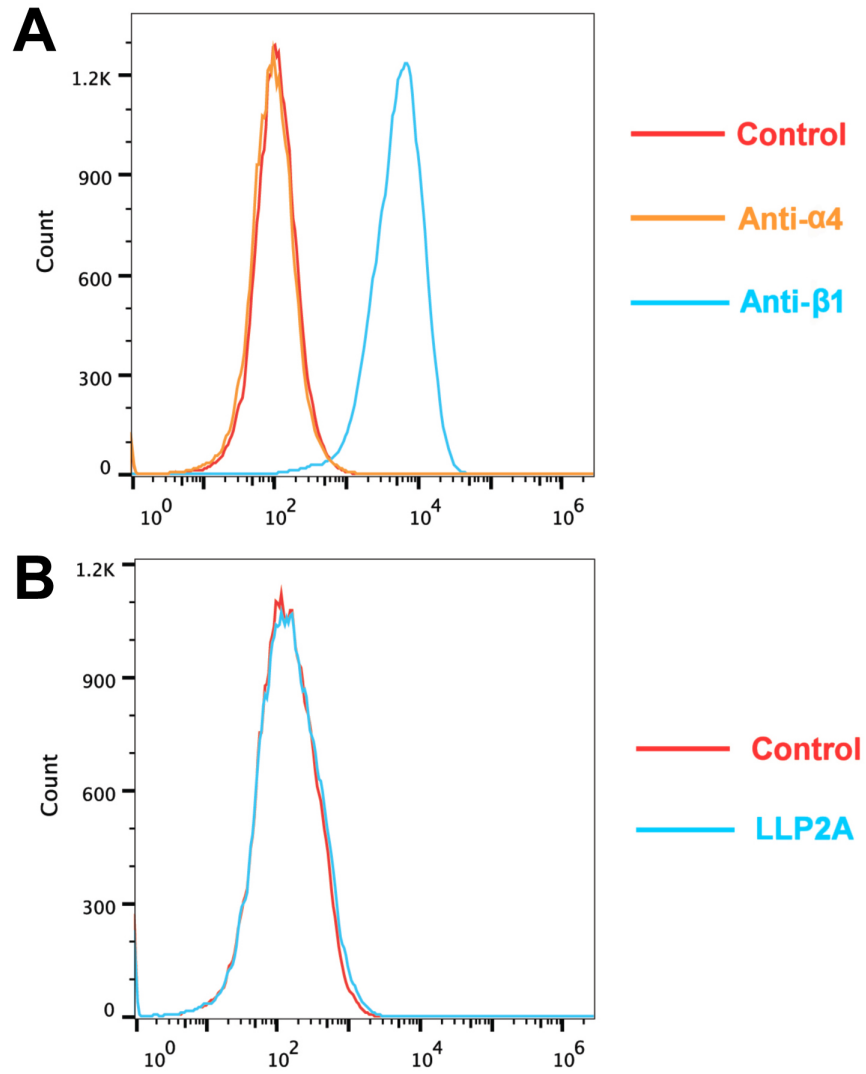


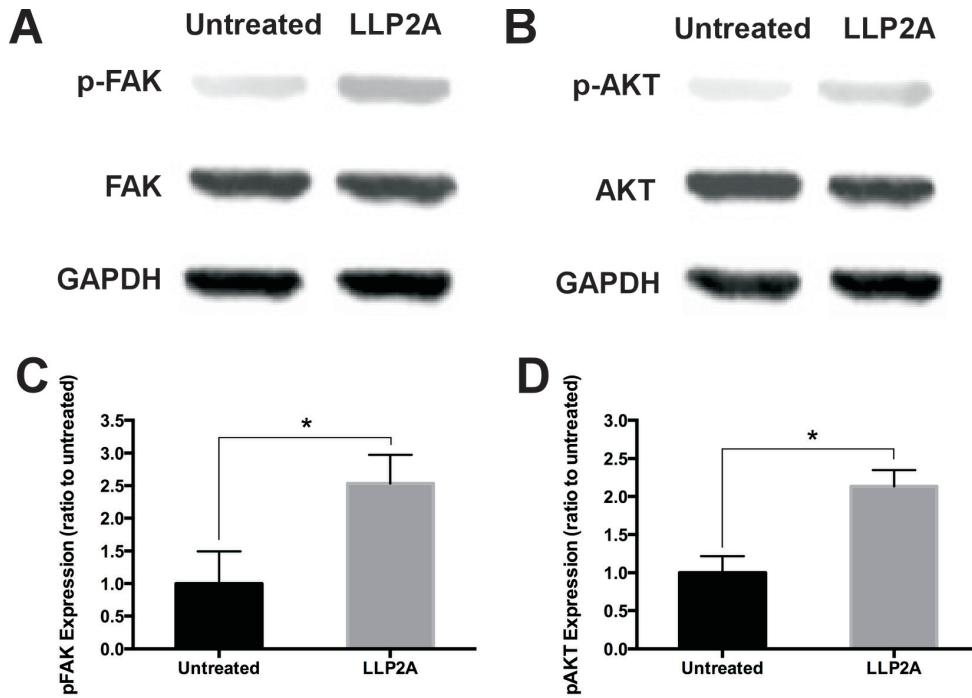
**SFig 1.** Synthetic schemes of LLP2A-Bio and LLP2A-DBCO



**SFig 2.** Attachment of BM-MSCs and AT-MSCs on LLP2A-treated surface. (A) Images of attached (a, b) BM-MSCs and (c, d) AT-MSCs on (a, c) untreated surface and (b, d) LLP2A-treated surface. The number of (B) BM-MSCs or (C) AT-MSCs attached to different surfaces was quantified, and statistical analyses were performed. Data were expressed as mean  $\pm$  standard deviation: \*\* $p < 0.01$  ( $n = 4$ ).



**SFig 3.** Binding mechanism of LLP2A to HCAECs. (A) HCAECs expressed integrin  $\beta$ 1 (blue curve), but did not express integrin  $\alpha$ 4 (orange curve). (B) LLP2A did not bind to HCAECs (blue curve).



**SFig 4.** Effects of LLP2A modification on CV-MSC biological functions on the PLLA/PCL scaffold. Western-blot analysis for (A) phosphorylated-FAK (pFAK) and (B) phosphorylated-AKT (pAKT) in the CV-MSCs cultured on the untreated scaffold or LLP2A-modified scaffold. (C, D) Quantification and the correlative statistical analysis. Data were expressed as mean  $\pm$  standard deviation: \* $p < 0.05$  ( $n = 4$ ).