

**Figure S4.** IL-17 expression was regulated by IL-1β and IL-6 *via* activating Stat3 and RORγt. (**A**) Combinatorial treatment of IL-1β (20 ng/ml) and IL-6 (50 ng/ml) elevated IL-17<sup>+</sup> cell ratio in culture expanded hMSCs, as assessed by flow cytometry. (**B**, **C**) The combinatorial IL-1β and IL-6 treatment increased IL-17 level in  $5\times$  concentrated culture supernatant, assessed by ELISA (**B**) and elevated IL-17 mRNA, assessed by qPCR (**C**). (**D**) IL-1β and IL-6 treatment activated IL-17, p-Stat3 and RORγt in hMSCs by Western blot analysis. (**E**) When hMSCs were pretreated with 5,15-DPP, a selective Stat3 inhibitor, for 2h, elevated expression of IL-17 and RORγt induced by combinatorial IL-1β and IL-6 treatment was blocked when 5,15-DPP concentration reached 10 μM, as assessed by Western blot analysis. \*, P<0.05, \*\*, P<0.01, and \*\*\*, P<0.001 (mean±SD). The data are representative of three independent experiments.