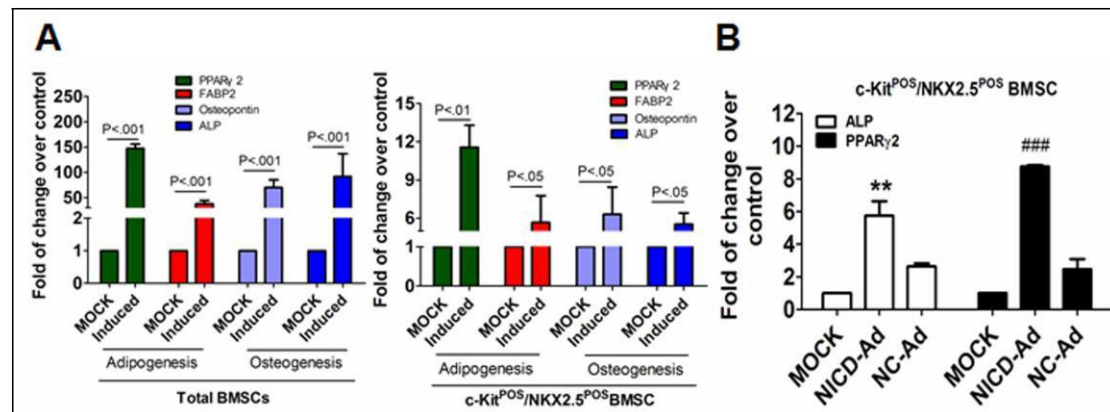


## Additional file 5



**Figure S3. Adipogenic and osteogenic differentiation in total BMSCs and c-Kit<sup>POS</sup>/NKX2.5<sup>POS</sup> BMSCs.** (A) Total BMSCs and c-Kit<sup>POS</sup>/NKX2.5<sup>POS</sup> BMSCs were seeded onto 6-well plates, then cells were induced to adipogenic and osteogenic differentiation using special inducing media (Cat:#RASMIX-9002 & #RASMIX-90031, Cyagen Biosciences, Guangzhou, China) for 3 weeks, then cells were subjected to quantitative RT-PCR analysis of markers for adipocyte lineage (PPAR $\gamma$ 2, FABP2) and osteoblast lineage (ALP, Osteopontin). Data were depicted as Mean  $\pm$  SD from 3 independent experiments. (B) c-Kit<sup>POS</sup>/NKX2.5<sup>POS</sup> BMSCs were seeded onto 6-well plates, Notch1 intercellular domain (NICD) expression adenovirus (NICD-Ad) and negative control adenovirus (NC-Ad) were added at the MOI = 100, cells without adenovirus infection was set as MOCK controls. First times of media changing was carried out 24 hours post infection, then media were changed every 3 days. Eight days post adenovirus infection, samples were used to quantitative RT-PCR analysis of marker for osteogenic differentiation (ALP) and adipogenic differentiation (PPAR $\gamma$ 2) expression. Data were depicted as Mean  $\pm$  SD from 3 independent experiments. \*\* $P$ <0.01 vs. other groups; ###  $P$ <0.001 vs. other groups.