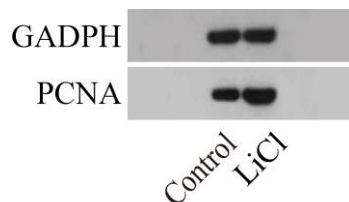


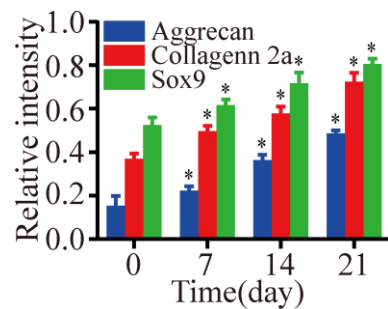
Mechanism of Wnt Pathway on Cartilage Differentiation of Adipose Derived Stem cells

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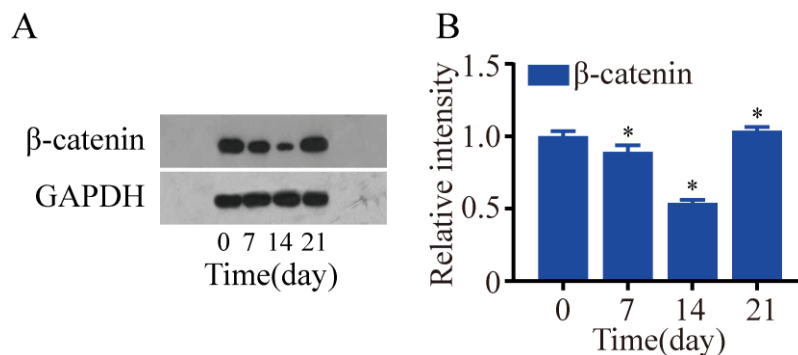
Supplementary Material



Additional file 1. The Wnt pathway promotes ADSCs proliferation under LiCl activator conditions. The expression of PCNA in the experimental group was significantly higher than that in the control group.

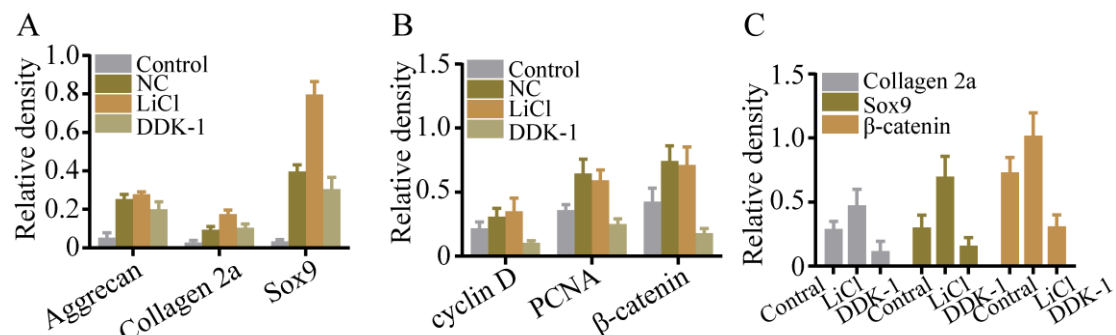


Additional file 2. Western blot expression of cartilage index during the induction and differentiation of ADSCs cartilage. Sox9 showed higher expression on day 7, and increased slowly on day 14 and 21; Collagen 2a Aggrecan was also highly expressed on day 7 and significantly so on day 14 and 21. (* P < 0.05).

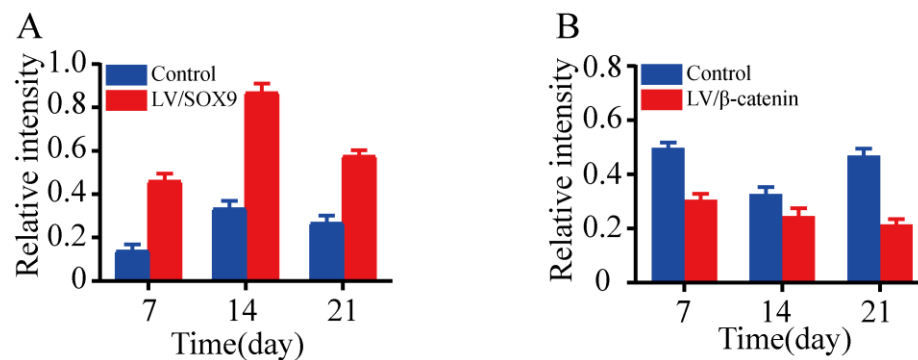


Additional file 3. Expression of β-catenin, an important factor in Wnt pathway. (a)

Qualitative detection of β -catenin protein by Western blot;(b) Quantitative detection of β -catenin protein by Western blot. (* $P < 0.05$).



Additional file 4.Quantitative analysis of the expression of key proteins during chondrogenic differentiation of ADSCs.(a) protein expression of various cartilage indicators; (b) expression of β -catenin and CyclinD PCNA protein, a proliferation index; (c) chondrogenic indicators and expression of β -catenin protein at day 21 of induced differentiation (* $P < 0.05$).



Additional file 5.Quantitative expression analysis of Sox9 -catenin protein after ADSCs induction and differentiation by lentivirus transfection.(a) Sox9 protein expression was significant in the lentiviral transfection group, especially on day 7 and day 14;(b) attenuated -catenin protein was lower than that of the control group at all stages (* $P < 0.05$).