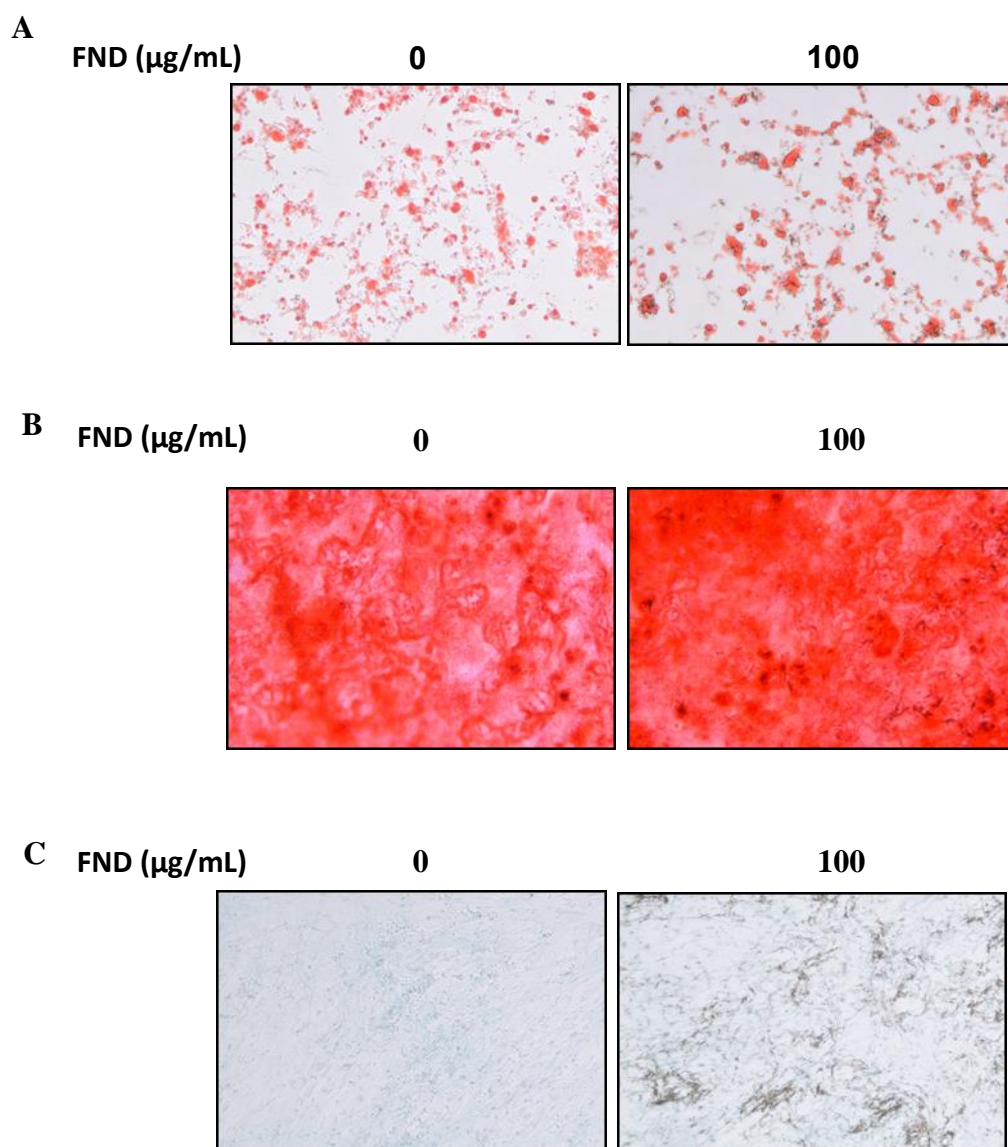


1 **Supplement 1**

2 **Figure S1. FNDs result in no alteration on cell differentiation derived from**
3 **hASCs.**

4 1×10^5 hASCs were pre-incubated with 100 μ g/mL FNDs overnight and replaced
5 with induction and culture medium of (A) adipogenesis, (B) osteogenesis or (C)
6 chondrogenesis for 3 weeks. Differentiations were confirmed by Oil-Red O, Alizarin
7 Red S and Alcian Blue staining respectively. (Magnification $\times 200$)

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9
10 **Figure S1.**



38 Supplement 2



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48 **Figure S2.**

49 **Appearance of hASC – glue group nude mice before (left) or after one-month**
 50 **(right) implantation.** The arrows indicate the locations of the implanted xenograft.

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54 Supplement 3

55 **Figure S3. (a) The allogenic irradiated costal cartilages were grounded into**
 56 **particles approximately 0.5 mm x 0.5 mm x 0.5 mm in size as decellularized**
 57 **cartilage ECM. (b) The ECM particles were then loaded into the syringe.**

58 (a).

(b)



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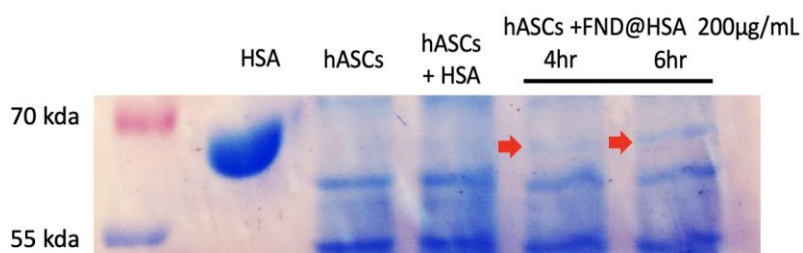
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72 **Supplement 4**

73 **Figure S4. SDS-PAGE analysis of HSA in hASCs incubated with HSA and**
74 **FND@HSA.** The hASCs were incubated, respectively with HSA, and 200 µg/mL
75 FND conjugated HSA for 4 and 6 hours. The protein lysates of these hASCs after
76 incubation or without incubation were subjected to SDS- PAGE analysis with
77 Coomassie staining. The presence of HSA (red arrows) increased in the cell lysates
78 of hASCs with FND conjugated HSA incubation for 4 and 6 hours compared with
79 hASCs with HSA incubation. HSA served as a positive control.



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