

**SUPPLEMENTARY FIG. S1.** Cell number in LhCG and wet weight of LhCG relationship. Four different LhCGs were weighed and freeze-dried overnight. Each piece was then digested with papain. To test the DNA content, the Hoechst 33258 dye assay was adopted (7.7 pg DNA/cell). The cell number–wet weight relationship was plotted, followed by linear regression treatment. The relationship equation was used to determine cell number in each LhCG and the amount of Ad-SDF to be used for transduction. LhCG, living hyaline cartilage graft.