



Supplementary Figure 1 FSS of 24 dyne/cm² regulated ECM metabolism. **a** Alcian blue staining for NP cells stimulated with FSS for indicated times (0, 1, 2, 3 and 4 hours). **b** Relative sGAG content of NP cells detected by Blyscan Sulfated Glycosaminoglycan Assay. **c** The typical western blot bands of Col2a1, aggrecan, MMP13 and ADAMTS5. **d-g** Summary data showing protein levels of Col2a1, aggrecan, MMP13 and ADAMTS5. NS means no statistical significant difference. The data are expressed as mean \pm SD from three independent experiments. (* $P < 0.05$, ** $P < 0.01$ and *** $P < 0.001$ vs. the group of 0 hour group)