

Saggiaro et al. Supplementary figures

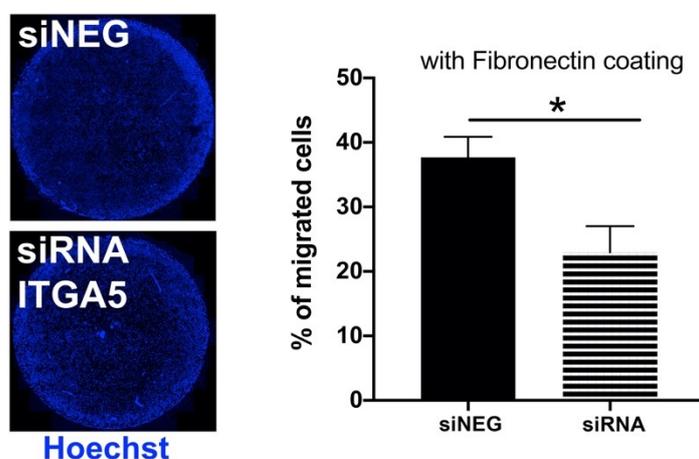


Figure S1. Migration test with fibronectin coating. The histogram shows percentage of migrated cells after 24 h for siNEG (black) and siRNA *ITGA5* (black lines) (N=3). Hoechst immunofluorescence staining of migrated cells on the bottom surface of the Boyden chamber has been considered. $P < 0.05$.

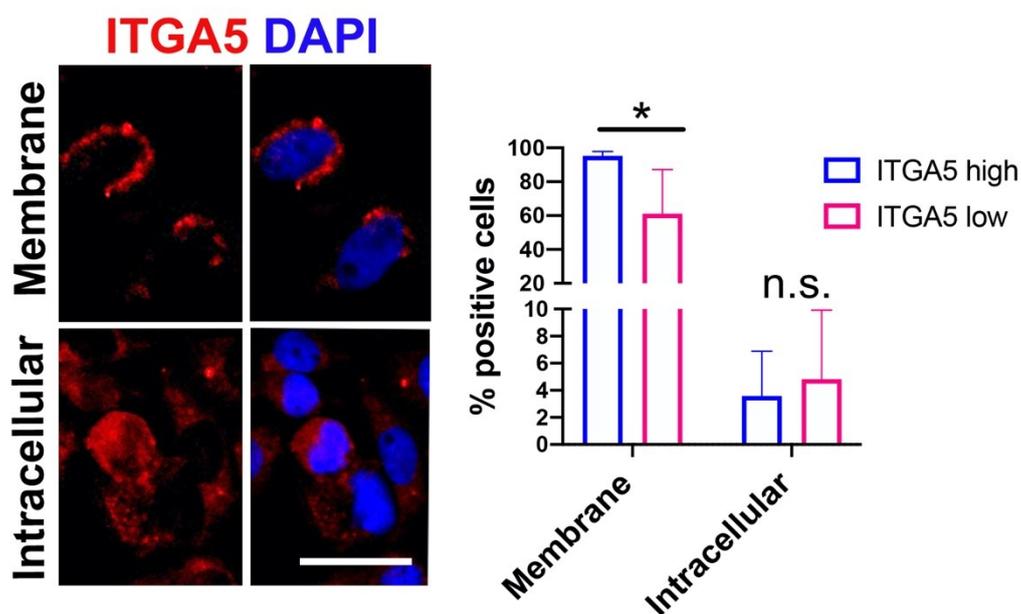


Figure S2. Evaluation of membrane and intracellular expression of ITGA5. ITGA5 staining on ITGA5^{high} and ^{low} at passage zero. Scale bar: 50 μm . $p < 0.05$. n.s.= not significant.

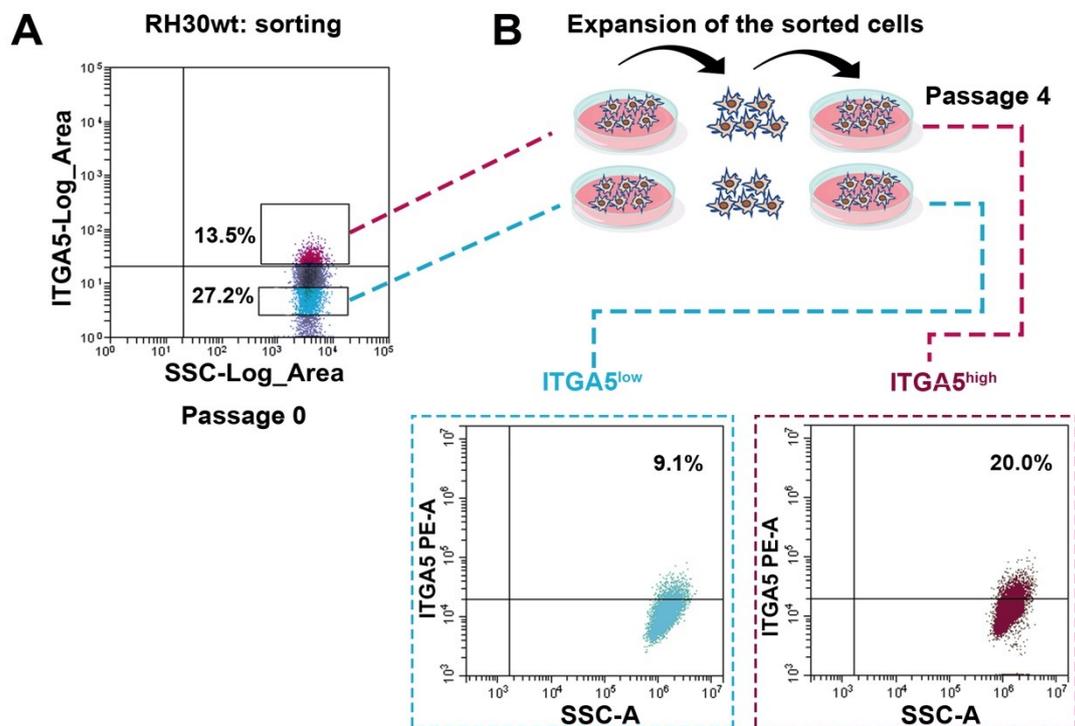


Figure S3. ITGA5^{high} and ITGA5^{low} expression during time. **A.** Sorting of the two population of RH30 cells. **B.** Cytograms showing the percentage of ITGA5 maintained in the two cell populations after 4 passages in culture. **C.** ITGA5 staining on ITGA5^{high} and ^{low} at passage zero.

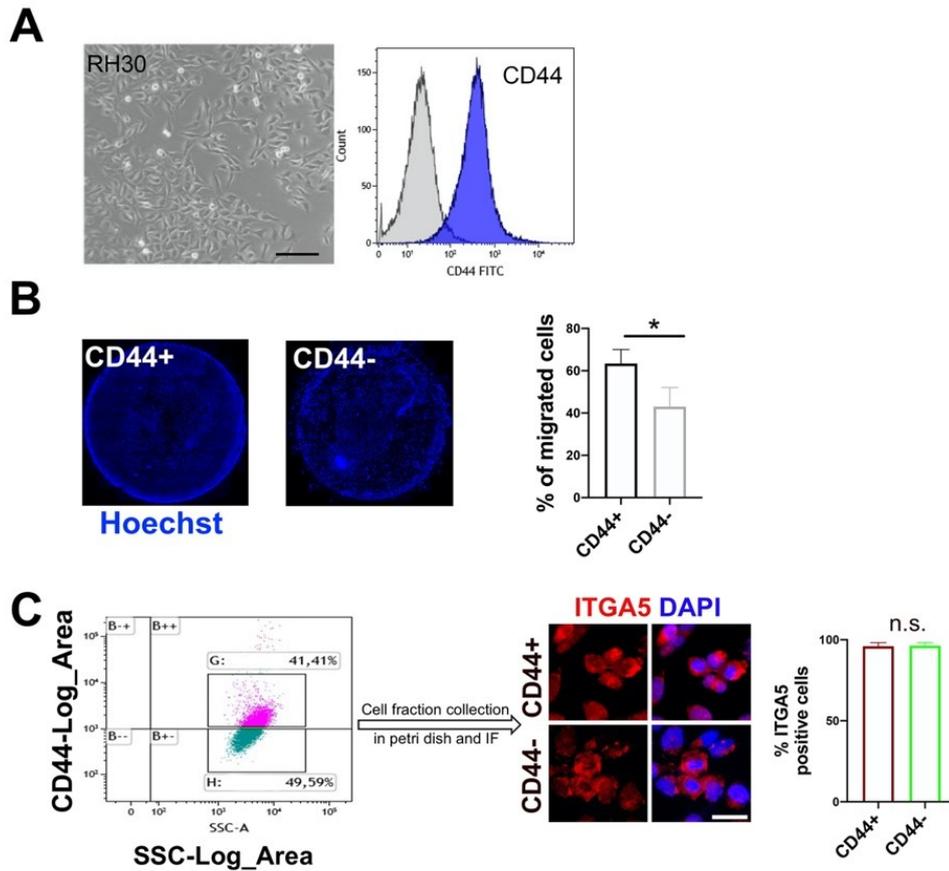


Figure S4. RH30 and CD44 expression. **A.** Phase contrast of RH30 cells (**left**). Cytofluorimetric expression of CD44, the hyaluronic acid (HA) receptor (**right**). **B.** RH30 cells stained for CD44 were sorted. Two fractions, CD44+, CD44-, were collected and plated (**left**). 72 hours from the sorting, ITGA5 IF was performed in both cell population (**right**). **B.** Migration assay of RH30 CD44+ and RH40 CD44- cells. CD44+ possess higher migration ability. Scale bar: 50 μ m. $p < 0.05$. n.s.= not significant.

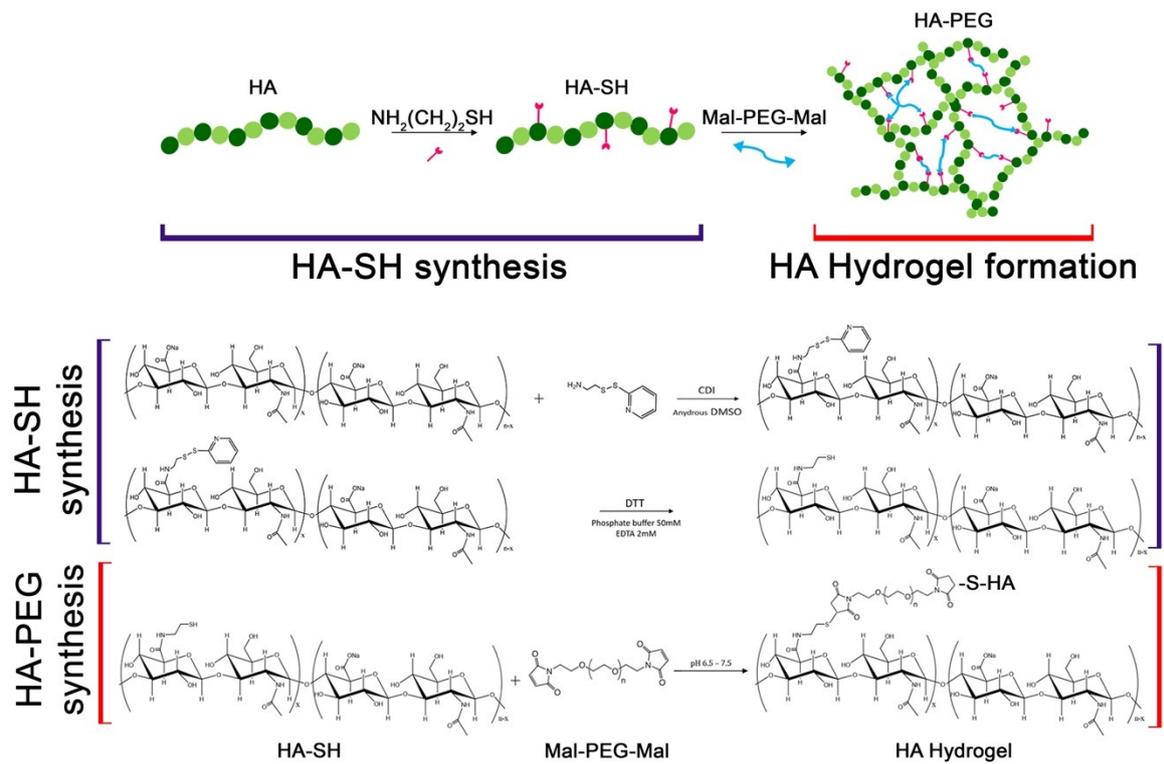


Figure S5. Scheme of hydrogel synthesis.

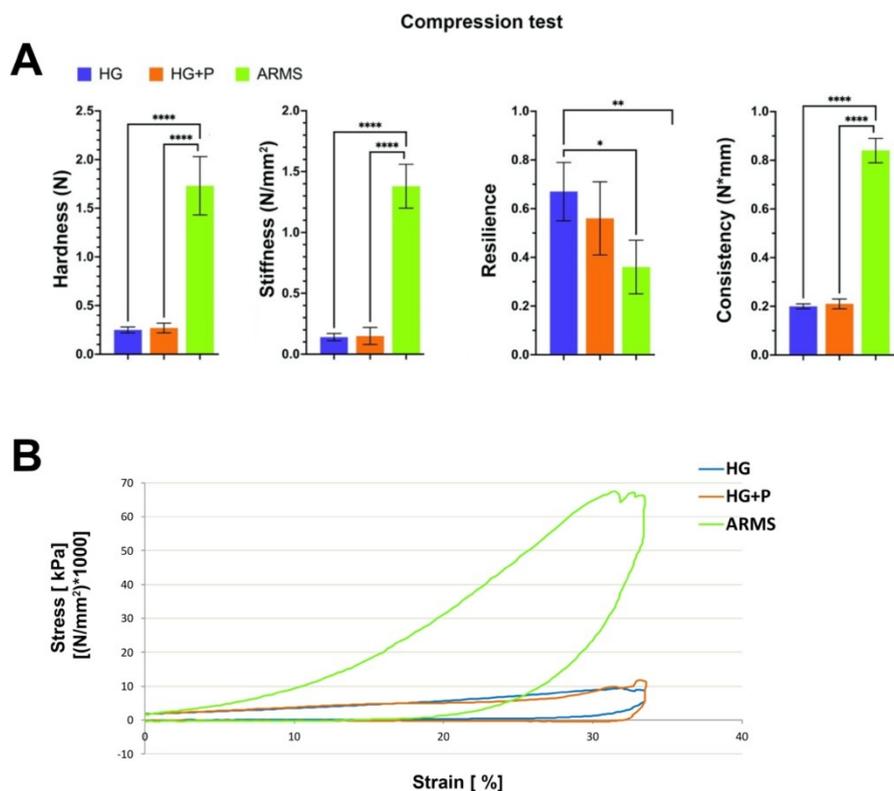


Figure S6. A Rheological characterization of HG, HG+P, ARMS xenogeneic tissue. *:p<0.05, **:p<0.01, ****:p<0.0001. **B** Stress and strain curves. Stress: force/area of sample. Strain: percentage of deformability (displacement/ high of the samples).

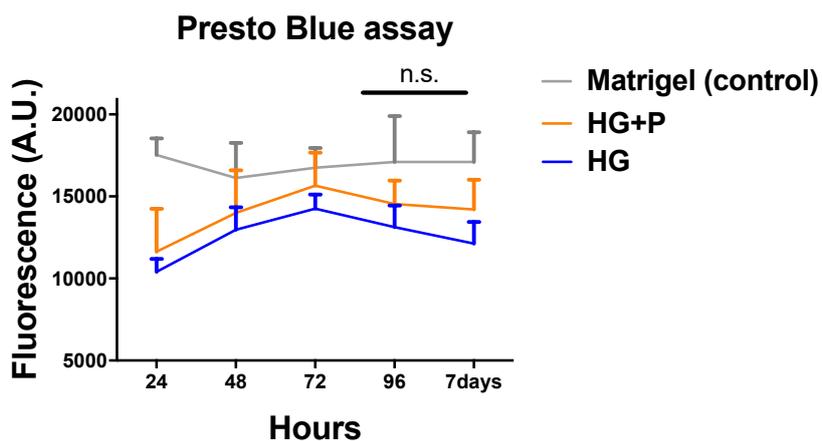


Figure S7. Viability test on Matrigel, HG and HG+P with RH30 cells. Presto Blued assay underlined the good viability of cells in HG and HG+P conditions. Not significant differences have been found comparing the cell viability in the Matrigel control condition. n.s.= not significant.

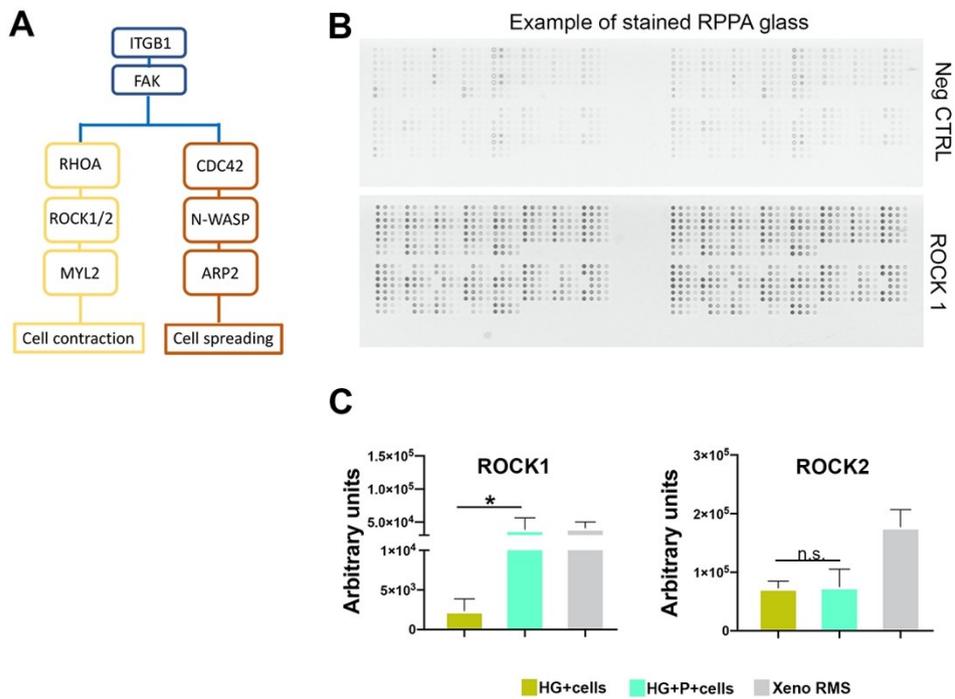


Figure S8. A. Cartoon of the Rho pathway. **B.** Example of stained RPPA glass with dots of DBA. Negative control and positive antibody staining for ROCK1. **C.** ROCK1 and ROCK2 protein expression. RPPA values are directly normalized by MicroVigene 5.6.0.8 software on GAPDH signals used as loading control. *: $p < 0.05$. n.s.: not significant.