

SUPPLEMENTARY MATERIALS

A Silicone-Based Stretchable Micropost Array Membrane for Monitoring Live-Cell Subcellular Cytoskeletal Response

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FIGURE CAPTIONS

Figure S1. Evolution of the absolute, non-normalized total cellular contractility for individual VSMCs (*gray* lines) and population means (*black* lines with marker symbols) under different stretch conditions as indicated (**a**: 6% stretch; **b**: 15% stretch). Error bars indicate \pm standard errors (SE) of the cell populations. *P*-values calculated using the paired student's *t*-test are indicated for statistically significant differences ($P < 0.05$ (*); *N.S.*, not significant).

Figure S2. Evolution of the average contractile forces exerted on individual PDMS microposts partitioned into the cell central and peripheral regions underneath the VSMC tracked throughout the whole stretch assay (top row, **a-c**: three individual VSMCs stretched at 6%; bottom row, **d-f**: three individual VSMCs stretched at 15%). *White* symbols were the population mean for the PDMS microposts at the cell periphery and *red* symbols were the population mean for the PDMS microposts at the central region of the cell. The *black* symbols corresponded to the population mean for all the PDMS microposts underneath the individual VSMCs.

Figure S3. Evolution of contractile forces exerted on individual PDMS microposts underneath the VSMC tracked throughout the whole stretch assay (top row, **a-c**: three individual VSMCs stretched at 6%; bottom row, **d-f**: three individual VSMCs stretched at 15%). *Blue* curves were from the PDMS microposts at the cell periphery and *gold* curves were from the PDMS microposts at the central region of the cell. The bold *black* curve corresponded to the population mean for the PDMS micropost in the cell periphery region and the bold *red* line corresponded to the population mean for the cell central region. In **d-f**, the numerical data in the plots indicates the maximum values that the outlier curves reached outside the plot window.

FIGURES

Figure S1

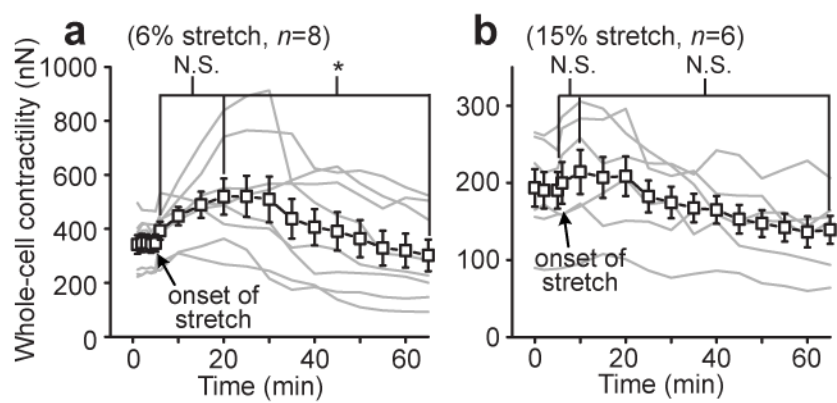


Figure S2

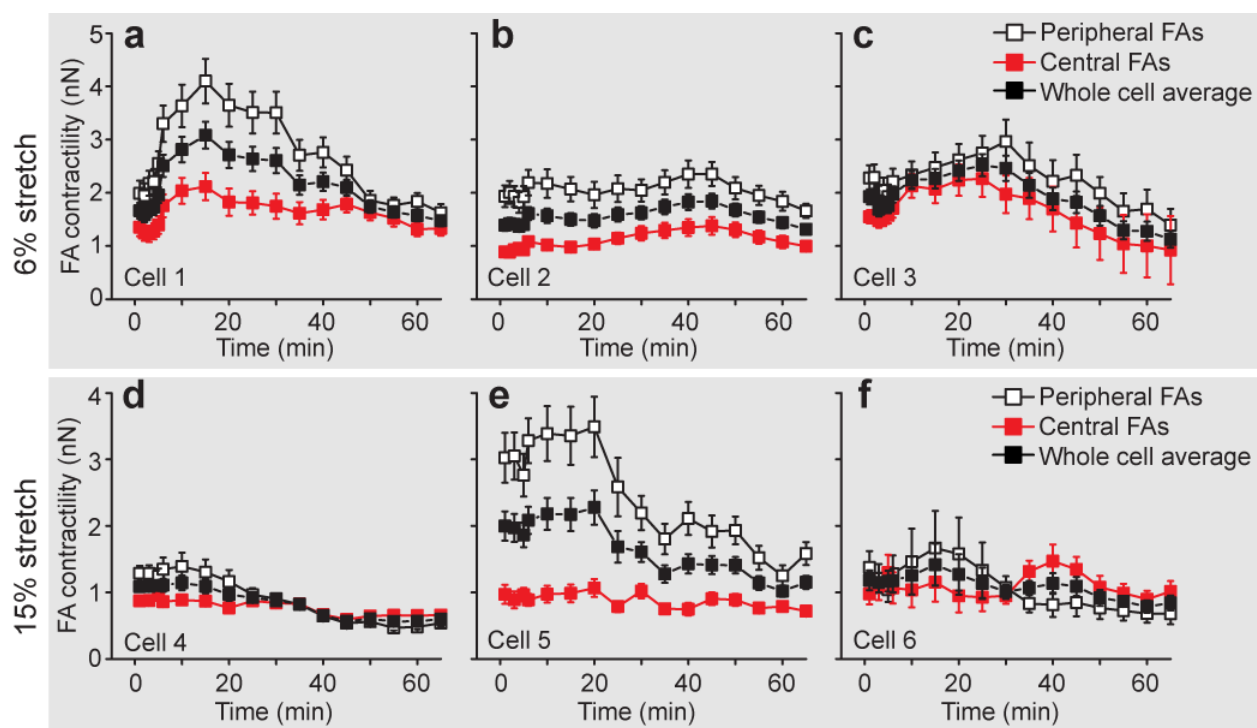


Figure S3

