

Supplementary Information for:

Biphasic response of T cell activation to substrate stiffness

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Table S1

Figs. S1, S2

Supplementary Figures

| Measured E (kPa) | Acrylamide (%w/v) | Bis-acrylamide (%w/v) | Strep-Acryl concentration (%w/v) |
|------------------|-------------------|-----------------------|----------------------------------|
| 5 | 4 | 0.03 | 0.0167 |
| 17 | 8.666 | 0.0433 | 0.0167 |
| 25 | 6.667 | 0.0667 | 0.0333 |
| 75 | 6.667 | 0.2667 | 0.0333 |
| 110 | 6.667 | 0.5333 | 0.0167 |

Table S1. Composition of PA-gels and measured Young's modulus values.

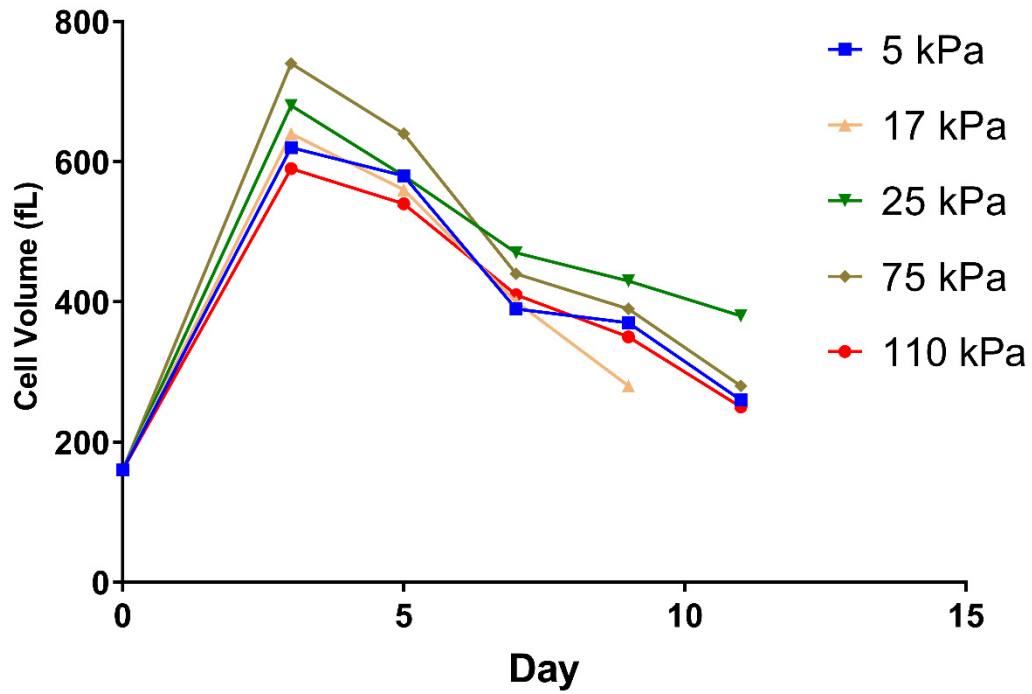


Figure S1. Cell sizing during long term proliferation of activated T cells on coated hydrogels. The data in this panel are from a representative experiment, comparing sizing of cells undergoing expansion from a single donor as a function of substrate stiffness.

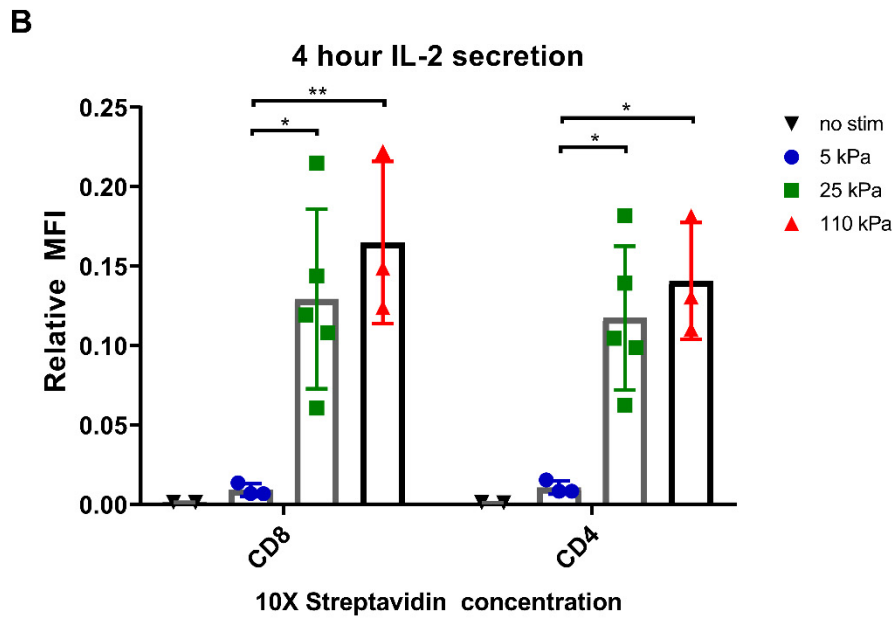
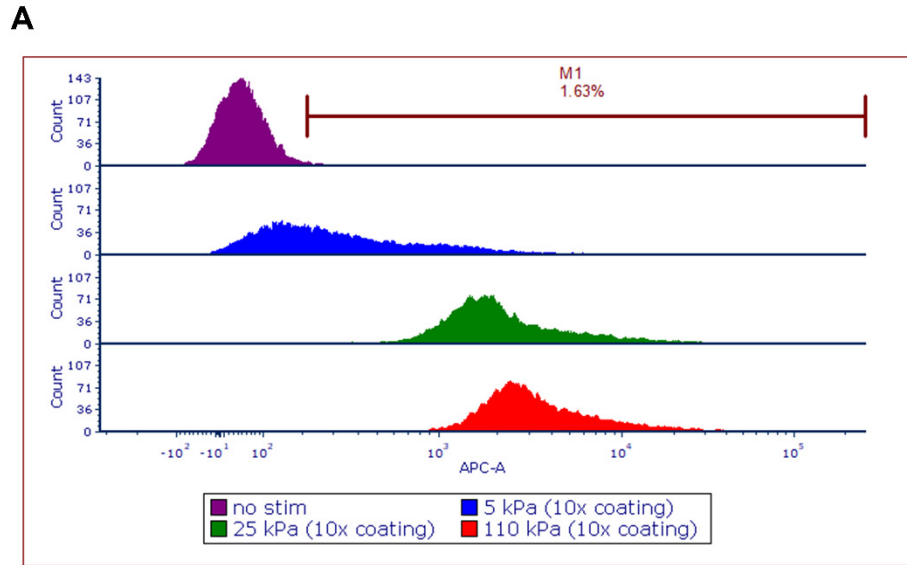


Figure S2. Representative intensity plots of IL-2 secretion of T cells activated on hydrogels of various rigidities, with A) 10X coating. B) 4 hour IL-2 secretion of CD4 and CD8 T cells activated on 10X coated substrates. Data are mean \pm s.d., * $p < 0.05$, ** $p < 0.01$, 2-way ANOVA, Tukey multiple comparison test.